Saranac River Trail Feasibility Study

PLATTSBURGH, NEW YORK

PLATTSBURGH, NEW YORK

Master Plan
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PLANNING + DESIGN

TABLE OF CONTENTS

This document was prepared by Alta Planning + Design (www.altaplanning.com) in cooperation with the Saranac River Trail Advisory Committee (SRTAC). Funding support was provided by the State of New York through the offices of New York State Senator Little.

i. Executive Summary

The Saranac River Trail (SRT) is a non-motorized facility for transportation and recreation from the shoreline of Lake Champlain along the river through the City and Town of Plattsburgh, New York. Connecting the city to the Saranac River is an important opportunity for Plattsburgh's economic redevelopment, tourism, and quality of life initiatives. The SRT will create a path through the center of the city that re-defines the community. This project is about more than just building a trail – it will be the catalyst that helps Plattsburgh continue to be a great place to live, work, and play.

This feasibility study reviewed existing conditions, connections to nearby destinations, available public lands, other opportunities and constraints, and considered a series of alternatives. The Saranac River Trail Advisory Committee (SRTAC) participated in the project and is an important resource for moving the SRT forward. The proposed first phase of the SRT will be a three-mile long section between Plattsburgh High School and the Lake Champlain Waterfront. This project will connect the Lake Champlain Waterfront redevelopment area, downtown Plattsburgh, and the SUNY Campus.

The region's culture and heritage are integral elements of the proposed trail, which includes a series of 'mile points' that highlight key events in local history. Examples include a proposed 'Peace Point' commemorating the events of September 11, 1814 and September 11, 2001, a 'B-52 Park' at the former NYSEG site to highlight the region's role in the Strategic Air Command, and a new park and playground along Pine Street that highlights the natural environment along the river. In the future, the SRT can be extended to connect with both the existing Gordon Bike Trail and the Fleury Bike Trail, and the 'Blue' and 'Red' single track trails west of the Imperial Dam. The SRT can also serve as a water trail, with improved canoe, kayak, tubing, and fishing access along the river.

Creating the SRT project will take a sustained effort with many partners. In order to advance the project, the following 'next steps' are recommended:

- **Preserve the Right-of-Way**: The community's top priority must be to ensure that the proposed alignment for the trail remains intact and in public ownership. This will involve keeping an eye open for opportunities such as the upcoming Saranac Street Bridge project, redevelopment along the Lakefront, and the ongoing NYSEG site negotiations.

- **'Early Win' Projects:** Support and action at the local level will grow out of small successes that move the project forward. Neighborhood cleanups and 'adoption' of future trail sections can help build long-term support. Local organizations and agencies will need to be involved in creating sections of the trail that can be linked over time into the overall concept.

- **Initiate Fundraising and Grant Writing:** There are a variety of funding sources available for projects like the SRT, and all available opportunities should be pursued, including SAFETEA-LU federal transportation funds. A Transportation Enhancements application was submitted to NYSDOT for the SRT in June, 2006.

A Bikes Belong Grant application should be developed as a follow-up to the NYSDOT TE grant.

- **Set Up a Maintenance Endowment:** Many successful trails establish a fund for ongoing operation and maintenance. Starting this effort at the beginning of a trail project will help sustain the effort in the future. This is also an item to which a local philanthropy, corporation, or individuals can contribute.

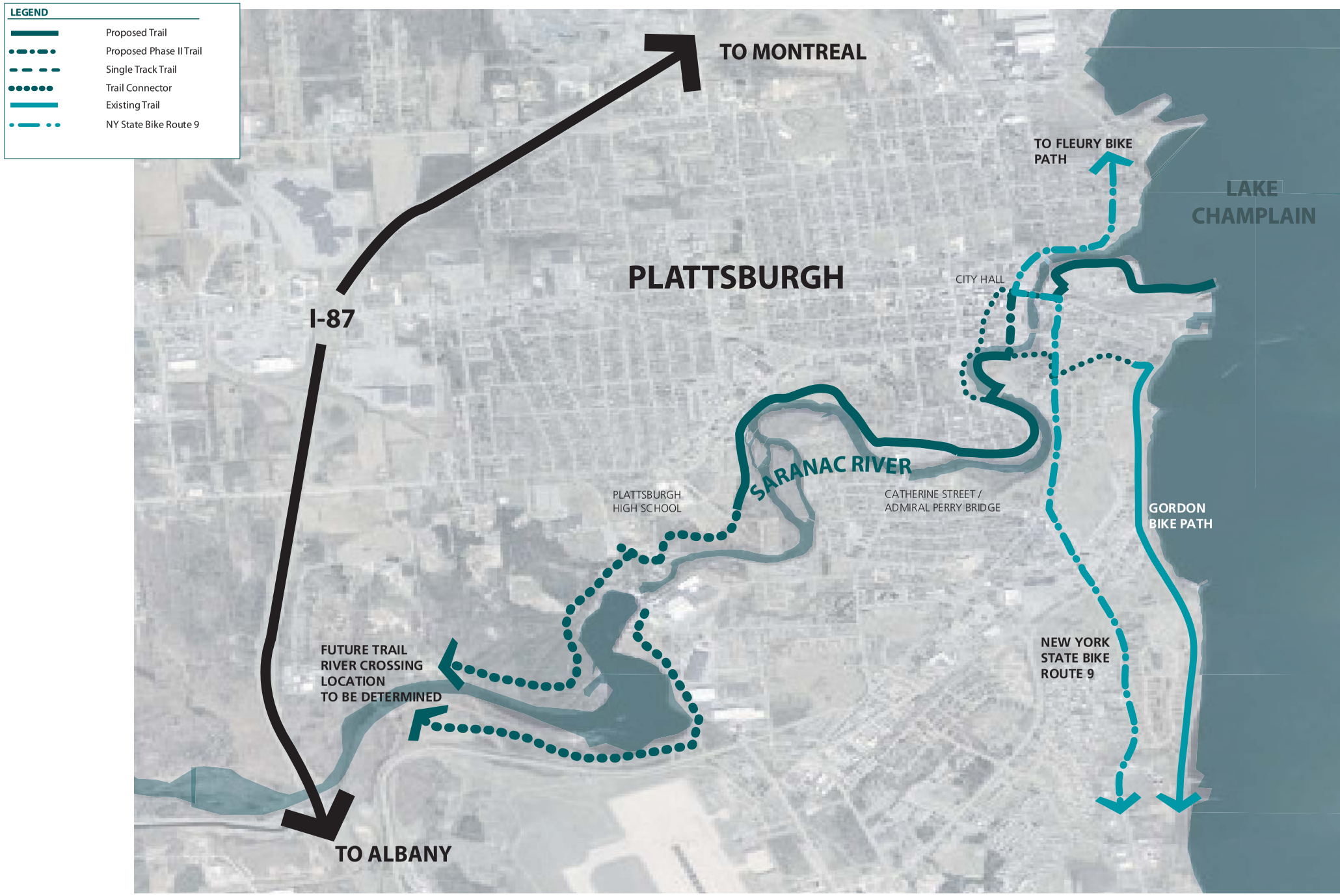
- **Public-Private-Non-Profit Partnership:** Establish a 'Friends of the SRT' non-profit organization to advocate for the project, and keep the SRTAC and other agencies involved in advancing the project.

A proposed logo for the SRT creates an identity for the project that combines nautical symbols, colors, and an image for the trail. This image can become an integral part of the 'branding' of the SRT.

The map on the following page highlights the SRT and its connections to the growing trail network in Plattsburgh. With these actions moving forward, the SRT will be a significant asset for Plattsburgh's residents and visitors.

SARANAC RIVER TRAIL

TRAIL CONNECTIONS



1. Project Narrative

The Saranac River Trail (SRT) is a project to create a non-motorized facility for transportation and recreation from the shoreline of Lake Champlain along the river through the City and Town of Plattsburgh, New York. The primary focus area of the SRT is between the Imperial Dam west of Plattsburgh High School and the Lake Champlain waterfront. The study also examines the potential for extending the trail north to Cumberland Head via the Karen Fleury Bike Path and west along the river in the Town of Plattsburgh to the I-87 bridge. This feasibility study is funded with support from the office of New York State Senator Little, and in cooperation with the Saranac River Trail Advisory Group (SRTAG), which includes representatives of the public and private sectors.

The existing path along the river near the marina shows the potential connection between the SRT, the Amtrak Station, and the waterfront redevelopment area.

Plattsburgh is located south of Montreal and across the lake from Burlington, Vermont, both cities that have created extensive networks of bicycle facilities. In the 1980's, a trail called the Verdantique Trail was proposed along the river in Plattsburgh. The Verdantique Trail was not fully funded, but the concept is still important. The City has implemented sections of trail along the river, including the linear park across from City Hall. The Saranac River Trail represents an important opportunity for Plattsburgh to create a shared-use path through the center of the city. This project will be the catalyst for connecting a system of paths throughout Plattsburgh.

Existing shared-use paths and bikeways in the project area include the Gordon Bike Path along Lake Champlain (a rail-with-trail project parallel to the CSX / Amtrak line from Montreal to New York City), the Fleury bike path from Scomotion Creek to the beach at Cumberland Head, and the path along Route 9 south of the City. New York State Bike Route 9 also runs through the city, and is part of the Lake Champlain Bikeways tourism corridor and the Lakes to Locks Passage Scenic Byway. New bike lanes are being provided on City Hall Place from Bridge Street to Cornelia Street as part of a streetscape reconstruction project. The SRT will provide intermodal connections to ferry and rail transportation facilities. Bike racks and benches will be provided along the route to improve connections to local bus services.

The most common trail users to be expected on the Saranac River Trail in Plattsburgh are people walking and bicycling. The trail will provide for a wide range of short distance utilitarian trips, including travel from the SUNY Campus to downtown, from residential neighborhoods to the elementary, middle, and high schools, and travel from downtown to the Lake Champlain waterfront. The trail will also provide water trail access to people using the Northern Forest Canoe trail for fishing and boating along the river. Winter use will include cross-country skiing, and the SRT will provide access to nearby single track

mountain bike trails so that people will not have to drive from the city to nearby trailheads. The shared-use path will be designed to meet NYSDOT, AASHTO, and ADA guidelines.

Phase 1 of the Saranac River Trail (SRT) will create a three-mile long, non-motorized facility for bicycle and pedestrian transportation from the shoreline of Lake Champlain along the river between the Imperial Dam site west of Plattsburgh High School and the Lake Champlain waterfront near the Plattsburgh Amtrak Station. This phase will connect schools, the State University of New York at Plattsburgh (SUNY), downtown Plattsburgh, residential neighborhoods, and the lakefront redevelopment area. The trail is proposed to be a 10-foot–wide, asphalt, paved, shared-use path from a new trailhead at George Angell Drive / Saranac High School through the SUNY campus, along the River at Stelzer and Pine Streets to a trailhead at the existing pedestrian bridge at Saranac Street at the Middle School. From Saranac Street Bridge, the trail will follow an interim route using existing sidewalks and an enhanced on-street bikeway (with new signage, striping, and pavement markings) along Pine and Margaret Streets and across the river on the Bridge Street bridge. At Green Street, the shared-use path will resume, utilizing a short section of abandoned rail line on the north side of the street and the existing at-grade crossing of the CP railroad tracks. On the east side of the tracks, the shared-use path will continue along the shore of Lake Champlain to the new lakefront hotel and the Amtrak station.

The SRT supports the City's current planning and economic development efforts, including downtown revitalization, making the Saranac River into the 'heart' of downtown, and the ongoing redevelopment of the Lake Champlain waterfront. Phase 2 will include the proposed new pedestrian bridge at the NYSDEG site and potential improved access along the river on 'floating' sections beneath the three existing downtown bridges. These sections will require additional engineering analysis to determine feasibility and cost. The interim on-street connection between the Middle School and Green Street will enhance connections into the Margaret Street commercial area, and will continue to be an important linkage when the trail is fully connected in the future. Future phases will include an improved route alignment along the downtown riverfront and connections to the growing trail system in the community. Ultimately, the SRT will also extend west along the river in the Town of Plattsburgh, and to a network of shared-use paths and single track trails throughout Plattsburgh.

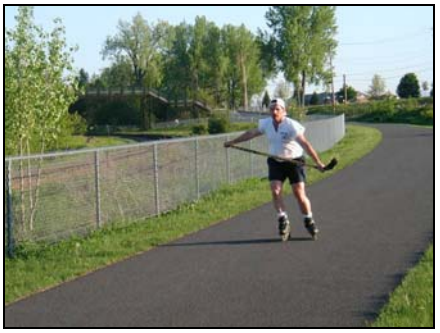
It is important to note that the SRT project is planned to capture the heritage and history of Plattsburgh as an integrated element of the trail design. Interpretive sites, themes, and icons were developed through research into the community's internationally significant local history. The Saranac River Trail will tell the story of Plattsburgh, including the region's Native American heritage, the American Revolution, the Battle of Plattsburgh in the War of 1812, the Strategic Air Command during the Cold War, and the natural history of the river itself. Two upcoming events of national significance are directly related to the completion of this project. The 200th anniversary of the Battle of Plattsburgh (which took place on September 11, 1814) will be featured at the trail's endpoint at the Lake Champlain lighthouse, which will feature a 'Peace Point' commemorating the events of September 11, 1814 and September 11, 2001. The SRT will also feature a significant connection to the 400th anniversary of the voyages of Henry Hudson and Samuel de Champlain, which will be commemorated in 2009.

The SRT is about more than just a trail for walking and bicycling – it is also about redefining Plattsburgh and ensuring a connection between the past, present, and future. These concepts are based on the work of the SUSTRANS national bikeway system in the U.K., and the efforts of the United States Millennium Trails program. The SRT will be a unique example of capturing the heritage of a community as an integrated element of the trail design, and will serve as a model project for other communities in New York State. Proposed interpretive sites along the SRT will include destinations along the trail commemorating the region's Native American, British, and French heritage; a 'B-52' park; 'Peace Point;' an interpretative installation of the USS Saratoga; and a 'fish' themed playground along the river. These interpretive elements are not part of the Phase 1 funding request. However, they are integral to the community's vision for the SRT and will be developed during future phases of the project.

The 'adopt a brick' walkways on the existing Riverwalk at the Champlain Monument are examples of Plattsburgh's support for improved trails and public access along the Saranac River.

1.2 Trail User Analysis

There are a wide range of potential trail users and experiences available along the Saranac River in Plattsburgh. Trail users will vary by trail type, as well as by age, by experience, and by when they are using the trail and with whom they may be traveling. Individuals may fall into multiple categories at different times of day, or at different times in their lives. A 'typical' trail user might bike to work in the morning, walk their children home from school, go for a mountain bike ride with friends on the weekend, and cross-country ski in the winter. A visitor could be a guest at a business meeting who goes jogging in the afternoon, or an 'eco tourist' who comes to experience the Lake Champlain region on a week-long bike tour. These diverse users share common interests in the following areas:



An in-line skater along the Gordon Bike Path in Plattsburgh

1. **Safety**: The trail system should be safe for all users, providing alternatives to traveling along and across roadways, the Saranac River, and other barriers.

2. **Easy to Use**: The system should be user-friendly, with signage, maps, and wayfinding information that is available in language-free and multilingual formats.

3. **Well Maintained**: The system should be maintained with surfaces that are smooth and free of debris and litter.

Individual trail user groups also have specific concerns, including:

1. **Pedestrians**: Prefer a smooth walking surface, clearly delineated crossings, benches and shade for resting, and trails close to residential areas for frequent use over short distances.

2. **Runners**: Often prefer soft shoulders as an alternative to running on asphalt or concrete. Runners are generally recreational users and do not usually commute to work via running. They are less likely than bicyclists to commute to work on trails.

3. **Disabled**: People with mobility impairments require smooth, firm, ADA compliant pathways, with rest areas on steep grades, maximum 2% cross slopes, barrier free facilities, and accessibility information at trailheads.

4. **Bicyclists**: Include several types of skill levels, from children and seniors who ride between 8-12 mph to highly skilled cyclists capable of sustaining speeds of more than 20 mph, to mountain bicyclists who may use pathways for access to more rugged single track trails. All require smooth, firm surfaces free of cracks, seams, or other surface imperfections.

5. **In-Line Skaters**: Require both a very smooth surface and wider pathways due to their swinging motion. Prefer asphalt pathways 10 feet wide.

6. **Equestrians**: Concerned with multiple-use conflicts, especially with bicyclists, since horses can react suddenly to them. Able to ride on 'natural' surfaces with minimal maintenance, require adequate height clearances.

7. **Cross-Country Skiers**: Include both skating and track skiers, who require different groomed surfaces. Snowshoe use has increased in recent years, and snowshoe tracks should be kept separated from cross-country ski trails if possible. Snow trail users can operate over frozen sections that may not be accessible year-round.

8. **Transit Customers**: Passengers who use the public transit system are pedestrians, bicyclists, and others who choose to travel without using a private motor vehicle.

9. **Water Trail Users:** Canoeing, kayaking, and tubing are all potential uses of the Saranac River trail. Water trail users need a place to enter and exit the river, safety information due to seasonal flood conditions, and access to places for fishing and recreation along the river.

10. **Motorized Trail Use:** While snowmobiles and ATV's are frequently used in the North Country, they are not appropriate in the center of the City of Plattsburgh. However, there may be locations farther from the city and in the Town of Plattsburgh where some shared-use of the corridor by motorized trails is possible.

The most common trail users to be expected on the Saranac River Trail in Plattsburgh are people walking, running, and bicycling, and people using the water trail for access to the river.

1.3 Opportunities and Constraints

Using Geographic Information System (GIS) data provided by the City of Plattsburgh, aerial photos, property ownership information, existing flood plain and wetlands delineations, and a review of existing plans and documents, an opportunities and constraints map was developed for the SRT. Key opportunities and constraints were identified as follows:

Opportunities:

- Existing pedestrian bridges at Saranac Street, Suspension Bridge and at George Angell Road
- Proposed new 'signature' pedestrian bridge between the NYSEG site and downtown
- Middle and Secondary schools in the project corridor
- City-owned waterfront land along Pine Street
- Public easement along the Farmer's Market site
- Public right-of-way along former D&H Railroad siding to connect with Gordon Bike Path
- New waterfront redevelopment along Lake Champlain, including new sidewalks to Amtrak, the Gordon, Fleury and Route 9 Trails, New York State Bike Route 9
- Wide-one way street overlooking the River adjacent to Riverside Cemetery (Stelzer Street)
- 1980's Plan for "Verdantique Park" along the river on the SUNY Campus
- Significant heritage and cultural assets in the community, especially local history
- Redevelopment of the Plattsburgh Air Force Base into a mixed-use community
- New bike lanes are included in this year's reconstruction of City Hall Place

Constraints:

- Limited public rights-of-way along the south side of the river
- NYSEG Environmental Remediation Site and parcel at the foot of Durkee Street
- Limited river crossings, especially west of Plattsburgh High School
- Fort Brown sensitive historic resources between Rt. 9 and the South bank of the river
- Flood plain limitations on crossings under existing road bridges
- Active CP rail line between Green Street pedestrian bridge and downtown.
- Cost of new pedestrian bridge between NYSEG site and downtown
- Steep grades and narrow section along the river at Kent Hall on the SUNY Campus
- Grade change between Steltzer Road and the SUNY Campus
- No public access at Adirondack Lane (private street) west of the High School
- Bridge Street has a one-way section for one block east of Margaret Street, a counter flow bike lane or dismount zone is required.

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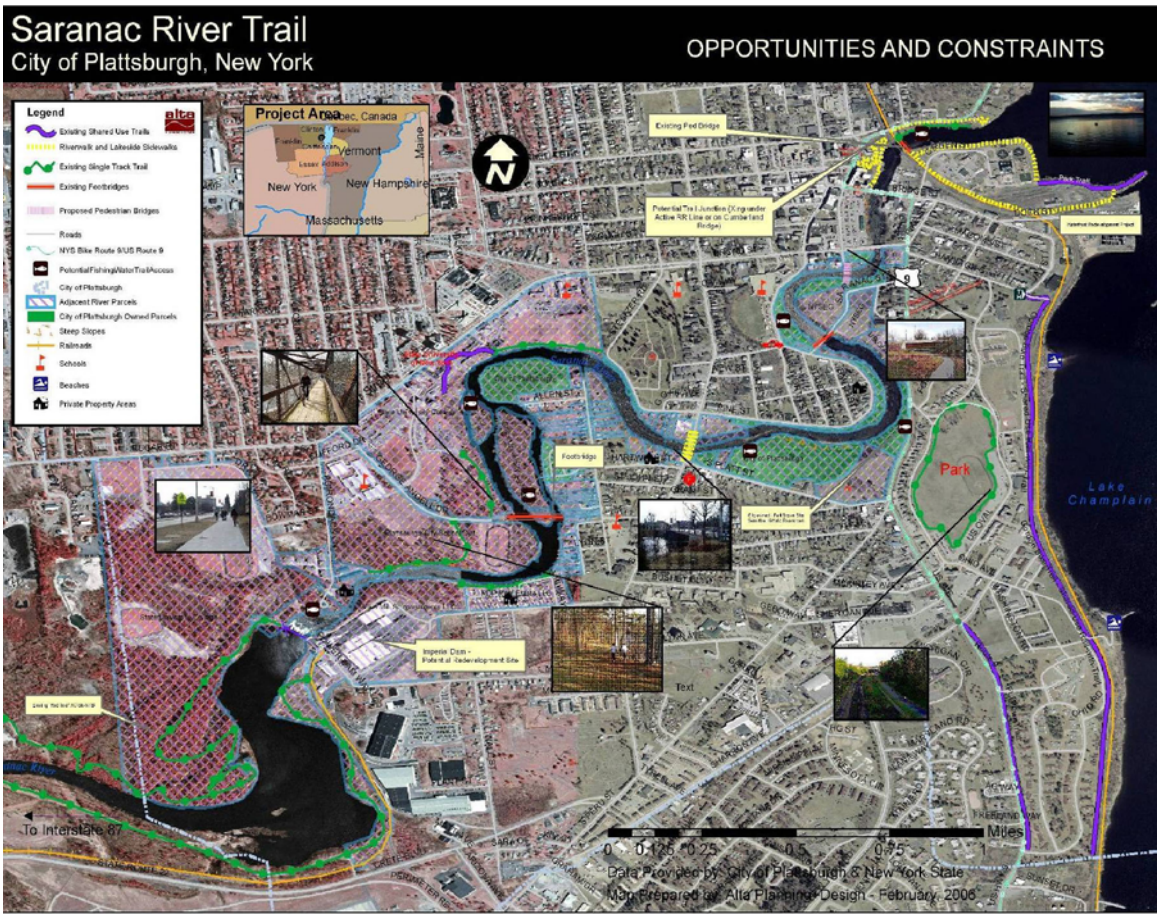
Property acquisition, environmental issues (including historic preservation), public involvement, land coordination with other agencies (railroads, utilities, regulatory agencies, etc.) will be part of the process to ensure that this project can be successfully implemented.

The preferred alignment and project phasing was developed to limit the potential key issues for the first phase of the project to the following: 1) coordinating the agreement for the trail on the SUNY Campus, 2) design of the grade change from Stelzer Street to the Campus to meet ADA requirements, and 3) working closely with the Pine Street neighborhood to reach consensus on the project design (the project is on City-owned land in this section). The opportunities and constraints map developed for the SRT is shown below.



2. Demand and Benefits Analysis

Plattsburgh is a city of approximately 19,000 residents, with a population and economic base that has declined since the closure of the nearby Strategic Air Command base in the 1990's. The city's median resident age is 29.6 years, the median household income is $28,846 (year 2000) and the median house value is $97,400 (year 2000). Significant suburban development has taken place in the Town of Plattsburgh around the I-87 interchange, and this kind of development has capitalized on cross-border trade with nearby Canada. At the same time, there is growing interest and opportunity for city-center development, including a new hotel along the Lake Champlain waterfront and potential re-development of properties along the river in the downtown area. Burlington, the City's neighbor across Lake Champlain, provides a nearby example of a city that has encouraged economic activity by redeveloping its waterfront. A signature element of Burlington's revitalization is the waterfront trail along the Lake.

2.1 Existing Census Data Trends

From a transportation perspective, it is important to note that from 1990 to 2000, the mode share of people walking and bicycling to work has declined by more than 30% in Clinton County. (see the table below). This is indicative of broader social trends in the region, and is informative about the potential for the Saranac River Trail to reverse this trend and be a positive step towards the future for the community.

CENSUS TRANSPORTATION PLANNING PACKAGE (CTPP 2000)

Source: http://ctpp.transportation.org/part2/36019.xls

Geographic Area: Working in Clinton County, New York

TABLE 1. SELECTED CHARACTERISTICS BY PLACE OF WORK, 1990 and 2000

Selected Characteristics (Universe: All Workers)	1990		2000		Change 1990 to 2000	
	Number	Percent	Number	Percent	Number	Percent
Workers 16 years or over	**37,888**	**100**	**34,210**	**100**	**-3,678**	**-9.7**
Sex						
Male	20,984	55.4	17,455	51.0	-3,529	-16.8
Female	16,904	44.6	16,750	49.0	-154	-0.9
Mode to work						
Drove alone	28,088	74.1	26,575	77.7	-1,513	-5.4
2-person carpool	4,764	12.6	3,470	10.1	-1,294	-27.2
3-or-more-person carpool	957	2.5	605	1.8	-352	-36.8
Bus or trolley bus	195	0.5	235	0.7	40	20.5
All other transit[1]	9	0.0	29	0.1	20	222.2
Bicycle or walked	2,598	6.9	1,800	5.3	-798	-30.7
Taxicab, motorcycle, or other mode	294	0.8	405	1.2	111	37.8
Worked at home	983	2.6	1,090	3.2	107	10.9

2.2 Demand Analysis

A variety of demand models are often used to quantify usage of existing bicycle facilities, and to estimate the potential usage of new facilities. The purpose of these models is to provide an overview of the demand and benefits for bicycling and walking in Plattsburgh. As with all models, the results presented show a range of accuracy that can vary based on a number of assumptions and available data. The models used for this study incorporated information from existing publications as well as data from the U.S. Census. All data assumptions and sources are noted in the tables following each section of the analysis.

2.2.1 Existing Bicycle Demand

The Plattsburgh bicycle demand model consisted of several variables including commuting patterns of working adults, and predicted travel behaviors of area college students and school children. For modeling purposes, the study area included all residents within the city of Plattsburgh in 2000. The information was ultimately aggregated to estimate the total existing demand for bicycle facilities in the city. Table 1 identifies the variables used in the model. Data regarding the existing labor force (including number of workers and percentage of bicycle commuters) was obtained from the 2000 Census.

In addition to people commuting to the workplace via bicycle, the model also incorporated a portion of the labor force working from home. Specifically, it was assumed that about half of those working from home would make at least one bicycling or walking trip during the workday. The 2000 Census was also used to estimate the number of children in Plattsburgh. This figure was combined with data from National Safe Routes to School surveys to estimate the proportion of children riding bicycles to and from school. College students constituted a third variable in the model due to the presence of SUNY-Plattsburgh. Data from the Federal Highway Administration regarding bicycle mode share in university communities was used to estimate the number of students bicycling to and from campus. Finally, data regarding non-commute trips was obtained from the 2001 National Household Transportation Survey to estimate bicycle trips not associated with traveling to and from school or work.

Table 1 summarizes estimated existing daily bicycle trips in Plattsburgh. The table indicates that over 1,300 trips are made on a daily basis, based on U.S. Census journey-to-work data. Most bicycle commuting trips are made by college students while school children make the fewest trips. The model also shows that non-commuting trips are likely to comprise the majority of existing bicycle demand. Note that the total trip quantity of 1,300 journey-to-work trips will be used as a baseline for benefits modeling, rather than the larger numbers based on trips of all purposes. This will allow for a more conservative approach, particularly in light of Plattsburgh's seasonal conditions that can affect utilitarian bicycling use.

Table 1: Aggregate Estimate of Existing Daily Bicycling Activity in Plattsburgh

Variable	Figure	Calculations
Employed Adults, 16 Years and Older		
a. Study Area Population [(1)]	18,750	
b. Employed Persons [(2)]	8,325	
c. Bicycle Commute Percentage [(2)]	0.5%	
d. Bicycle Commuters	42	(b*c)
e. Work-at-Home Percentage [(2)]	2.1%	
f. Work-at-Home Bicycle Commuters [(3)]	87	[(b*e)/2]
School Children		
g. Population, ages 6-14 [(4)]	1,579	
h. Estimated School Bicycle Commute Share [(5)]	2%	
i. School Bicycle Commuters	32	(g*h)
College Students		
j. Full-Time College Students [(6)]	5,174	
k. Bicycle Commute Percentage [(7)]	10%	
l. College Bicycle Commuters	517	(j*k)
Work and School Commute Trips Sub-Total		
m. Daily Commuters Sub-Total	678	(d+f+i+l)
n. Daily Commute Trips Sub-Total	**1,356**	(m*2)
Other Utilitarian and Discretionary Trips		
o. Ratio of "Other" Trips in Relation to Commute Trips [(8)]	2.73	ratio
p. Estimated Non-Commute Trips	3,702	(n*o)
Total Estimated Bicycle Trips	5,058	(n+p)

Notes:
Census data collected from 2000 U.S. Census for City of Plattsburgh.

(1) 2000 U.S. Census, STF3, P1.
(2) 2000 U.S. Census, STF3, P30.
(3) Assumes 50% of population working at home makes at least 1 daily bicycle trip.
(4) 2000 U.S. Census, STF3, P8.
(5) Estimated share of school children who commute by bicycle, as of 2000 (source: National Safe Routes to School Surveys, 2003).
(6) Fall 2004 full-time enrollment (source: SUNY Plattsburgh).
(7) Review of bicycle commute share in 7 university communities (source: National Bicycling & Walking Study, FHWA, Case Study #1, 1995).
(8) 27% of all trips are commute trips (source: National Household Transportation Survey, 2001).

2.2.2 Existing Pedestrian Demand

Existing demand for pedestrian facilities was estimated using a model similar to the bicycle demand model. The study area boundaries, variables, and methodology for estimating pedestrian demand also generally reflect those used in the bicycle demand model. However this model included an additional variable to address transit access. Specifically, the model included pedestrian trips to and from public transit stops. Transit currently accounts for

about 3 percent of commuting trips in Plattsburgh, and the analysis assumed that about 75 percent of transit users would walk to and from transit stops. Estimating the pedestrian mode share of college students incorporated walking mode share data from other universities.

Enhancing the environment for walking and bicycling is important for Plattsburgh's economy, mobility, and quality of life.

Table 2 summarizes estimated existing daily walking trips in Plattsburgh. The table indicates that over 9,100 trips are made on a daily basis. Pedestrian travel patterns generally reflect those of bicyclists. Most commuting trips on foot are made by college students, while school children currently make the fewest trips. The model also shows that non-commuting trips comprise the majority of existing pedestrian demand. Due to Plattsburgh's northern climate conditions, the commuter trip total has been used as the demand quantity for this model, rather than the larger number of potential trips for all travel purposes.

Table 2: Aggregate Estimate of Existing Daily Pedestrian Activity in Plattsburgh

Variable	Figure	Calculations
Employed Adults, 16 Years and Older		
a. Study Area Population [1]	18,750	
b. Employed Persons [2]	8,325	
c. Pedestrian Commute Percentage [2]	12.0%	
d. Pedestrian Commuters	999	(b*c)
e. Work-at-Home Percentage [2]	2.1%	
f. Work-at-Home Pedestrian Commuters [3]	87	[(b*e)/2]
g. Transit Commute Percentage [2]	3.3%	
h. Transit Pedestrian Commuters [4]	206	[(b*g)*0.75]
School Children		
i. Population, ages 6-14 [5]	1,579	
j. Estimated School Pedestrian Commute Share [6]	11%	
k. School Pedestrian Commuters	174	(i*j)
College Students		
l. Full-Time College Students [7]	5,174	
m. Pedestrian Commute Percentage [8]	60%	
n. College Pedestrian Commuters	3,104	(l*m)
Work and School Commute Trips Sub-Total		
o. Commuters Sub-Total	4,571	(d+f+h+k+n)
p. Commute Trips Sub-Total	**9,141**	(o*2)
Other Utilitarian and Discretionary Trips		
q. Ratio of "Other" Trips in Relation to Commute Trips [9]	2.73	ratio
r. Estimated Non-Commute Trips	24,955	(p*q)
Total Estimated Pedestrian Trips	34,096	(p+r)

Notes:
Census data collected from 2000 U.S. Census for City of Plattsburgh.
(1) 2000 U.S. Census, STF3, P1.
(2) 2000 U.S. Census, STF3, P30.
(3) Assumes 50% of population working at home makes at least 1 daily walking trip.
(4) Assumes 75% of transit riders access transit by foot.
(5) 2000 U.S. Census, STF3, P8.
(6) Estimated share of school children who commute on foot, as of 2000 (source: National Safe Routes to School Surveys, 2003).
(7) Fall 2004 full-time enrollment (source: SUNY Plattsburgh).
(8) Based on walking mode share from other universities.
(9) 27% of all trips are commute trips (source: National Household Transportation Survey, 2001).

2.3 Benefits Analysis

In addition to models quantifying existing and future demand for non-motorized facilities, a variety of models can also quantify the benefits of such facilities. Models were used in this analysis to estimate the positive air quality, public health, transportation, and recreation benefits associated with existing and future bicycle/pedestrian travel in Plattsburgh.

2.3.1 Air Quality Benefits

Non-motorized travel directly and indirectly translates into fewer vehicle trips, and an associated reduction in vehicle miles traveled and auto emissions. The variables used as model inputs generally resembled the variables used in the demand models discussed earlier. Data including population, employed persons, and commute mode share were used for this analysis. In terms of daily bicycle trips, assumptions regarding the proportion of persons working at home reflect those used in the demand model. Other inputs included data regarding college student and school children commuting patterns.

Additional assumptions were used to estimate the number of reduced vehicle trips and vehicle miles traveled, as well as vehicle emissions reductions. In terms of reducing vehicle trips, it was assumed that 73 percent of bicycle trips would directly replace vehicle trips for adults and college students. For school children, the reduction was assumed to be 53 percent. To estimate the reduction of existing and future vehicle miles traveled, a bicycle roundtrip distance of eight miles was used for adults and college students; and one mile for school children. For pedestrian trips, a roundtrip distance of 1.2 miles was used for adults and college students, and a 0.5 mile distance was used for children. These distance assumptions are used in various non-motorized benefits models. The vehicle emissions reduction estimates also incorporated calculations commonly used in other models, and are identified in the footnotes of Table 3.

Estimating future benefits required additional assumptions regarding Plattsburgh's population and anticipated commuting patterns. According to the U.S. Census, approximately 8,300 people are currently employed in Plattsburgh. A future workforce population of 8,000 was used to reflect current overall patterns of population decline. In terms of commuting patterns, the walking and bicycling mode shares were increased to address higher use potentially generated by the addition of new non-motorized facilities and enhancements to the existing system. The estimated proportion of residents working from home was also slightly increased.

Table 3 summarizes existing and potential future air quality improvements associated with bicycling and walking in Plattsburgh. Combined, bicycling and walking currently remove about 3,800 weekday vehicle trips, eliminating nearly 7,700 daily vehicle miles traveled. Bicycling and walking also prevent nearly 4,500 tons of vehicle emissions from entering the ambient air each weekday. Since Plattsburgh is a northern climate city with long, cold winters, these numbers could be reduced by a factor of 30% due to the shorter 'walking and bicycling season.' This interpretation of the results would estimate the benefits at 2,500 trips reduced, 5080 VMT reduced and 3,000 tons of emissions reduced daily. Bikeway and

pedestrian network enhancements are expected to generate more bicycling and walking trips in the future. This growth is expected to improve air quality by further reducing the number of vehicle trips, vehicle miles traveled, and associated vehicle emissions.

It should be noted that this model only addresses commute-related trips. Unlike the demand models, this model does not account for air quality improvements associated with recreational non-motorized travel. Quantifying the benefits of recreational travel could further improve the air quality benefits of bicycling and walking.

Table 3: Existing and Potential Future Air Quality Benefits

	Bicycle		Pedestrian	
Vehicle Travel Reductions	**Existing**	**Future**	**Existing**	**Future**
Reduced Vehicle Trips per Weekday (1)	489	679	3,302	3,479
Reduced Vehicle Trips per Year (2)	127,534	177,141	861,760	908,039
Reduced VMT per Weekday (3)	3,792	5,430	3,898	4,211
Reduced VMT per Year (2)	989,694	1,417,126	1,017,293	1,098,984
	Bicycle		**Pedestrian**	
Vehicle Emissions Reductions	**Existing**	**Future**	**Existing**	**Future**
Reduced PM_{10} (tons per weekday) (4)	70	100	72	77
Reduced NO_X (tons per weekday) (5)	1,891	2,708	1,944	2,100
Reduced ROG (tons per weekday) (6)	275	394	283	306
Reduced PM_{10} (tons per year) (7)	18,210	26,075	18,718	20,221
Reduced NO_X (tons per year) (7)	493,660	706,862	507,426	548,173
Reduced ROG (tons per year) (7)	71,852	102,883	73,855	79,786

Note: VMT means Vehicle Miles Traveled

(1) Assumes 73% of bicycle/pedestrian trips replace vehicle trips for adults/college students; 53% reduction for school children.
(2) Weekday trip reduction multiplied by 261 weekdays per year.
(3) Bicycle trips: assumes average round trip of 8 miles for adults/college students; 1 mile for school children. Pedestrian trips: assumes average round trip of 1.2 miles for adults/college students; 0.5 mile for school children.
(4) PM_{10} reduction of 0.0184 tons per mile.
(5) NO_X reduction of 0.4988 tons per mile.
(6) ROG reduction of 0.0726 tons per mile.
(7) Weekday emission reduction multiplied by 261 weekdays per year.
(8) Due to climate and other local factors, the results of this table reduced in the text of this document to establish a more conservative benefits estimate.

2.3.2 Other Benefits

Bicycling and walking generate benefits beyond air quality improvements. Non-motorized transportation can also serve recreational purposes, improve mobility, and improve health. The "*BikeCost*" model, made available by the National Pedestrian and Bicycle Information Center, quantifies these benefits. Though focused primarily on bicycling, the model provides a starting point for identifying the potential cost savings of improving Plattsburgh's non-motorized transportation system.

Several modeling assumptions should be discussed. First, the *BikeCost* model is project-specific, requiring specific information regarding project type, facility length, and year of

construction. Because this study focuses on a larger study area, several variables were used. The model was based on a new three-mile off-street trail paralleling the Saranac River, with an expected 2011 'mid-year' of construction. The model also required other inputs obtainable from the 2000 U.S. Census, including bicycle commute mode share, average population density, and average household size.

Based on the variables described above, the *BikeCost* model estimated annual recreational, mobility, and health benefits. The benefits were quantified based on a combination of research from previous studies as well as other factors (which are identified in the footnotes of Table 4).

Table 4 summarizes the estimated benefits of an enhanced non-motorized system in Plattsburgh. Except for mobility benefits, the model outputs are represented on an aggregate basis. Potential annual recreational benefits range from a low estimate of about $81,600 to a high estimate of nearly $604,000. Annual health benefits range from about $5,700 to over $24,000. Mobility benefits were estimated on a per-trip, daily, and annual basis. The roughly $5 per-trip benefit of off-street trails could translate to an annual benefit of over $115,000. Decreased auto usage could also generate monetary benefits. As Plattsburgh is generally urban in character, the enhanced network could generate about $3,600 in annual savings from reduced vehicle trips.

Table 4: Estimated Aggregate Annual Benefits of an Enhanced Bikeway Network

Recreational Benefits (1)	**Low Estimate**	**Mid Estimate**	**High Estimate**
	$81,618	$244,855	$603,976
Mobility Benefits (2)	**Per-Trip**	**Daily**	**Annually**
	$4.96	$460	$115,114
Health Benefits (3)	**Low Estimate**	**Mid Estimate**	**High Estimate**
	$5,724	$11,449	$24,043
Decreased Auto Use	**Urban**	**Suburban**	**Rural**
	$3,634	$2,236	$280

Source: Benefit-Cost Analysis of Bicycle Facilities ("*BikeCost*") Model, Pedestrian and Bicycle Information Center.

(1) Recreational benefit estimated at $10 per hour (based on previous studies). Assumes one hour of recreation per adult. $10 value multiplied by the number of new cyclists minus the number of new commuters. This value multiplied by 365 days to estimate annual benefit.

(2) Assumes an hourly time value of $12. This value multiplied by 20.38 minutes (the amount of extra time bicycle commuters are willing to travel on an off-street path). Per-trip benefit then multiplied by the daily number of existing and induced commuters. This value then doubled to account for roundtrips, to reach daily mobility benefit. Daily benefit then multiplied by 50 weeks per year and 5 days per week.

(3) Annual per-capita cost savings from physical activity of $128 based on previous studies. This value then multiplied by total number of new cyclists.

3. Community Connections and Support

There are a range of documents and programs which demonstrate community support for the potential Saranac River Trail. The City's zoning states that its purpose is "*promoting public health, safety, morals, convenience, order, prosperity and general welfare of the community.*" (City of Plattsburgh Zoning, Chapter 270 of the City Code, November 2001). The Town of Plattsburgh updated its Comprehensive Plan in 2001. (http://labergegroup.com/projects/plattsburgh_plan.html).

The recent completion of the Fleury Bike Path, Gordon Bike Path, Bike Route 9, and the proposed local bike route system are indicators of potential support. It should also be noted that plans were drawn up in 1983 for Verdantique Park along the Saranac River on the SUNY Campus from Stelzer Road to the High School. Although this plan was not implemented, it includes the concept of a shared-use path along the river in this important section. It is also critical to note the existing waterfront path between Bridge Street and the pedestrian bridge adjacent to the CSX railroad bridge (see the photo on right below). This path is the cornerstone of the City's waterfront potential. The city also has a signed *Heritage Trail* and a "*Heart Smart Walking Trail*" that is signed through the community (see the photo on left below).

Other local and regional trails with potential connections to the SRT are noted as follows:

Plattsburgh Heritage Trail
Enjoy a self-guided tour of Plattsburgh's unique history and natural points of interest starting from the City Beach and ending at the old Air Force Base. Descriptive signs and markers trace the route for bikers and walkers.
http://www.cityofplattsburgh.com/downtownpburgh.htm

Town of Plattsburgh Waterfront Trail

The Town will complete public access improvements to Lake Champlain. The grant will support the development of a public park including a walking and biking trail, fishing, paddling, and picnic amenities. The trail system will connect to that of the Champlain Bikeway and provide trail users with water access and an historic viewshed. Last year, the Governor committed a $196,500 federal Land and Water Conservation Fund grant to the Town for the project.
http://www.state.ny.us/governor/press/05/june01_05-1.htm

On a broader scale, it is also important to note Plattsburgh's connections to the National Scenic Byways Program through the Lakes to Locks Passage, the Lake Champlain Bikeways Program, and the Northern Forest Canoe Route. These projects are described as follows:

Lakes to Locks Passage

'The Great Northeast Journey' is located in eastern Upstate New York. Designated as an All-American Road, Lakes to Locks Passage connects the historic, natural, cultural, and recreational resources of the Upper Hudson River, Champlain Canal, Lake George, and Lake Champlain for the byway traveler. The byway theme, 'The Four Lives of Lakes to Locks Passage,' tells the story of the nation-building activities that occurred along the waterway, establishing United States and Canada, two nations that have enjoyed nearly two hundred years of peace and prosperity. That powerful story has 'come to life' as the byway communities have come to recognize their unique resources and made a commitment to interpret them to residents and visitors alike.

The Corridor Management Plan for Lakes to Locks Passage is primarily implemented through a grass-roots network known as Local Action Committees (LACs). In Clinton County, numerous groups and organizations have come together to revitalize the economy; improve access to the waterfront; generate increased public awareness of the historic, recreational, and cultural assets; and develop the 'Old Base' as an historic and cultural destination. The group now known as CHART (Clinton County Coalition for Historic, Arts, Recreation, and Tourism) established the goal "to develop public and private sector investments to realize improved quality-of-life for the residents and increased regional visitation." CHART has identified specific roles and activities of the community's heritage and cultural organizations to implement infrastructure improvements, establish programs and events for heritage tourism, and community revitalization."
http://www.lakestolocks.com/documents/CP%20Museum%20Campus%20.pdf

Northern Forest Canoe Trail

The Northern Forest Canoe Trail, a 740-mile paddling trail stretching from Old Forge, New York to Fort Kent, Maine, has recently announced the third year of stewardship awards to eight projects along the Trail. Communities along the length of the four-state Trail will benefit from funding projects that further the goals of the trail and enhance local

communities' connections with their rivers. The 2004 awards ranged from $3,000 to $5,000, and primarily focused on design and production of sectional route maps, development of trailhead kiosks, and inventorying sections of the route for sacred Native American sites.

Following historic Native American routes, the Northern Forest Canoe Trail (NFCT) links waterways through the Adirondacks, Vermont, Québec, New Hampshire, and Maine. The trail is the first recreational multi-watershed project of its kind and the longest inland water trail in the Northeastern United States."
http://www.adirondack.org/041129pr.htm

Lake Champlain Bikeways

"Bicyclists are quickly discovering some of the finest cycling in North America along a 1,400+ mile network of bicycle routes known as Lake Champlain Bikeways, in the Lake Champlain Valley of Vermont, New York, and Quebec. The network includes a total of 35 loops and tours ranging from 10 to 60 miles in length. In addition to the Champlain Bikeway, there is a 363-mile principal route around the entire Lake and along the Richelieu River to Chambly, Quebec. Based on a rich array of natural, cultural, and historic themes, these loops meander along quiet back roads through extraordinary mountain and countryside scenery. With growing national interest in bicycle tourism, Lake Champlain Bikeways, a public/private partnership, is quickly expanding its bicycle route network while serving as the information clearinghouse on bicycling opportunities in the Champlain Valley."
http://www.champlainbikeways.org/

4. Public Access and Land Ownership

The City of Plattsburgh provided a database of parcels and land ownership along the Saranac River. There are 85 parcels in this listing, ranging from large land owners such as SUNY Plattsburgh to individual homes owned by local residents. A copy of the property ownership table is provided in the Appendix of this document. For the purposes of the alternatives analysis, the issues identified in the opportunities and constraints map were used to determine potential alignments. Based on the recommended alignment proposed in this study, a list of public access, easement, and right-of-way requirements was developed. The following list provides an overview of the right-of-way and access parcels along the Saranac River Trail.

The City of Plattsburgh owns land along Pine Street that has the potential to be part of the Saranac River Trail.

Summary of Key Parcels Along the Saranac River Trail

1. Adirondack Lane Parcel ID # 3706 : The pump station and trailhead for the existing 'Blue' trail is located at the end of Adirondack Lane. This is not currently a legal public access, although it is often used for fishing. The sewer pump station at the end of the road is accessed via a maintenance right-of-way. Adirondack Lane is only a public street up to approximately 500 feet west of the river. Access at this section is through a privately owned and maintained residential roadway. The street could be purchased by the city and upgraded to local roadway standards. An alternative would be to create an easement west of the private road to connect with the SUNY west campus, and then provide access to the Blue trail west of Adirondack Lane.

2. SUNY Plattsburgh Campus: The University has conceptually supported the SRT, but it will be necessary to work out an access agreement for the trail across the campus. The University's concerns include regulating access, safety, and security. There is a physical constraint at Kent Hall, where the trail will need to be fenced adjacent to first floor dorm rooms, and extended in a short cantilevered section between the building and the river bank.

3. Stelzer Road Ramp and Access / Parcel ID # 3374: At the west end of Stelzer Road, there is an existing dirt trail up the embankment between the SUNY Campus and the street. A power line easement crosses the river at this location and there is a private home north of the junction between the street and the University lands. Access between the end of the street, under the power lines and to the existing dirt trail will need to be confirmed. For ADA compliance, the trail will need to be ramped down approximately 15 vertical feet between the elevation of the street and the SUNY lands below.

4. Access Management – Catherine and Pine Streets / Parcel ID #3536: The trail alignment passes next to the Stewart's shop at the southeast corner of the intersection of Catherine and Pine Streets. Through access management improvements, it is possible to coordinate an improved streetscape in this short section to accommodate the trail on the south side of Pine Street and to improve pedestrian connections for the business at this location. An alternative is to utilize the existing sidewalk on the north side of the street, and to develop an on-street bikeway in this short section.

5. Pine Street Public Lands / Parcel ID # 3474 : There are a series of issues regarding public and private ownership and use of the land across the street from residences on Pine Street. The City's parcel database shows this land as public property. There are privately fenced sections on the property, including one area that is fenced in and has a trampoline set up along the river. These issues will need to be resolved as part of the SRT project. A playground and fishing site could be included along the trail in this section to provide an amenity for residents in the adjacent neighborhood.

6. Saranac Street Bridge / NYSEG Parcel ID # 3431: The vacant parcel along the river on the south side of the Saranac Street pedestrian bridge will require an access agreement with NYSEG. This parcel could also be a trailhead and fishing access point.

7. Pedestrian Bridge North Abutment / NYSEG Parcel ID# 3424: This short section is an important link and provides the north landing for the proposed new pedestrian bridge. The existing abutments from the former road bridge are located at this site. An easement will be required for this section.

A map summarizing these right-of-way and access issues is shown on the following page.

SARANAC RIVER TRAIL

PHASE I RIGHT-OF-WAY/ACCESS ISSUES

LEGEND

- TH — Trailhead
- F — Fishing Access
- B — Boat Launch
- T — Transit / Bike connection
- Milepoint / Trail Feature
- Trail / Roadway Intersections
- Proposed Trail
- Proposed Phase II Trail
- Single Track Trail

LAKE CHAMPLAIN

CORNELIA STREET

COURT STREET

BRINKERHOFF STREET

COUCH STREET

BROAD STREET

RUGAR STREET

EXISTING CP BRIDGE AND GRADE CROSSING

SUSPENSION BRIDGE

CP BRIDGE

CITY HALL

MARINA

BRIDGE STREET

AMTRAK STATION

FARMER'S MARKET

PARCEL #3424 (NYSEG) EASEMENT / ROW FOR BRIDGE ACCESS

EXISTING 50' EASEMENT

MIDDLE SCHOOL

PHASE II "SIGNATURE" PEDESTRIAN BRIDGE

CONSTRAINED AREA @ KENT HALL & HEALTH BUILDING

ACCESS ACROSS PARCEL #3374 & POWER LINES

RIVERSIDE CEMETERY

SARANAC STREET PEDESTRIAN BRIDGE

ACCESS MANAGEMENT OF PINE STREET ROW @ DRIVEWAYS

ACCESS ACROSS PARCEL #3431 (NYSEG)

SARANAC RIVER

CATHERINE STREET / ADMIRAL PERRY BRIDGE

RESOLVE PUBLIC OWENERSHIP OF LANDS ALONG PINE STREET

VERIFY SUNY PLATTSBURGH PUBLIC ACCESS

SUNY-PLATTSBURGH CAMPUS

GEORGE ANGELL DR

ADIRONDACK LANE

PLATTSBURGH HIGH SCHOOL

EXISTING WEBB ISLAND PEDESTRIAN BRIDGE

CATHERINE STREET

SUNY-PLATTSBURGH CAMPUS

Alternate alignment

ADIRONDACK LANE: EXISTING PRIVATE ROAD ACCESS ACROSS PARCEL #3706

MISSING LINK

IMPERIAL DAM

0 0.25 0.5 1 Miles

alta PLANNING + DESIGN

5. Context Sensitive Design, Graphic Identity & Signage

5.1 Context Sensitive Design

The Plattsburgh region has a rich heritage and culture that can be enhanced through the creation of the Saranac River Trail. From Native American history through the War of 1812, the World War II and Cold War history of the Strategic Air Command, the railroads, the Adirondacks and Green Mountains…all are part of the story of Plattsburgh. Before the construction of the canal connecting Lake Champlain with the Hudson River, the economic development of the Champlain Valley was inextricably linked to its markets in Canada. A new Champlain Valley Transportation Museum has been developed to tell about the region's land and water transportation heritage. The region's history is summarized by the following text from the City's website:

A City Rich with American Heritage

"Imagine a community as old as America itself and you have Plattsburgh. The Champlain Valley has been at the center of many chapters of American history. The Champlain Valley was a rich region for hunting for Native Americans.

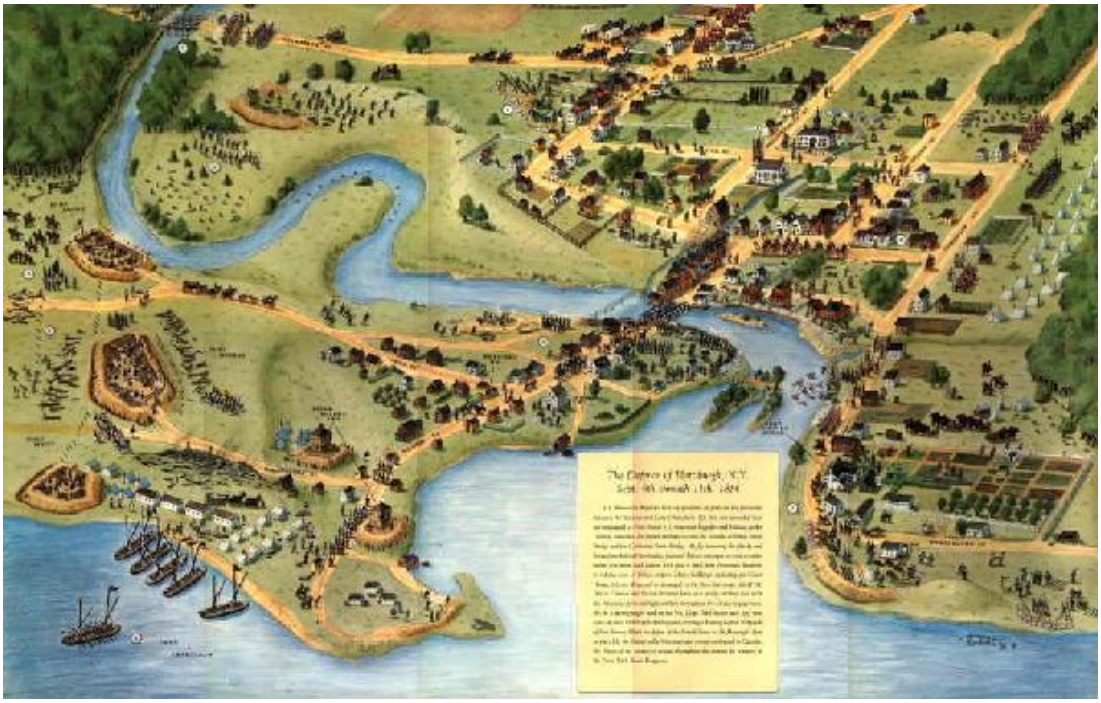
As European's explored and developed the "New World", they used Lake Champlain as the original "North American Super Highway". It served as a vital transportation link between Montreal and New York City.

When it comes to military history this region cannot be matched. The area has been part of the French and Indian Wars, American Revolution, War of 1812, Civil War, World War I, World War II, Korean War, Cold War, Vietnam War and Desert Storm.

The "Underground Railroad" had extensive routes through the region. Our close neighbor to the west, Lake Placid, has hosted two Winter Olympics in 1932 and 1980."

Source: http://www.cityofplattsburgh.com/historicpburgh.htm

Source: http://www.co.clinton.ny.us/images/Photos/CardSaranacMouth.jpg



Source: http://www.northnet.org/clintoncc/cccpage/battlec1.jpg

Historic maps highlight the importance of the Saranac River in the heritage of Plattsburgh.

Photos of the Champlain Monument (top L) and McDonnough / War of 1812Victory Monument (top R) and City Hall (bottom) show both the architectural and cultural history of Plattsburgh.

5.2 Graphic Identity and Signage

The local icons and themes identified as context sensitive design elements can be integrated into the graphic identity of the Saranac River Trail. The following are a series of examples of existing signage located along the river in the City of Plattsburgh.

The proposed logo for the Saranac River Trail incorporates a graphic combination of colors that symbolize land and water, along with a letter "S" representing the river and a series of nautical flags that spell out the acronym "S R T." This logo can be incorporated into trail signage, promotional materials, maps, and literature associated with the trail. Marketing and "branding" of the SRT will be an important element of the success of the trail.

6. Alternatives Analysis

For the purposes of this study, three primary alternatives were investigated. These were developed based on the alternatives and constraints analysis, the potential trail user groups, and the potential for the alternative to be advanced. The alternatives are described as follows:

Alternative #1: South Side Path
This alignment shows a paved shared-use path generally located on the south side of the Saranac River from the Imperial Dam to the pedestrian bridge at Green Street. This is a challenging alignment due to substantial sections of right-of-way required in the first section east of the dam, in the area east and west of the Catherine Street Bridge, and in the downtown area between Broad Street Bridge and the pedestrian bridge.

Alternative #2: North Side Trail
This concept shows a paved shared-use path along the north side of the river from the SUNY and Plattsburgh High School campuses, along a portion of Stelzer Road adjacent to Riverside Cemetery, along City-owned floodplain lands adjacent to Pine Street, across the pedestrian bridge at Saranac Street, through the NYSEG remediation site, across the river on a new 'signature' pedestrian bridge, and along the river through the Farmer's Market site to connect to the existing waterfront esplanade.

Alternative #3: Shared-Use / Single Track Combination
This alternative provides a paved shared-use path on both sides of the Saranac River in downtown Plattsburgh between the Saranac Street pedestrian bridge and the Green Street pedestrian bridge, and then creates a single-track dirt trail from Saranac Street to the west along the river. The downtown path can serve as a focal point for economic redevelopment along the riverfront, and the single track is a low-cost alternative that will allow for walking, running, mountain bicycling, and cross-country skiing.

A detailed analysis of the proposed alternatives was presented in the Task 2 Summary report presented to the SRTAC. The Committee used an evaluation matrix and reached consensus on the proposed alignment presented in the following pages.

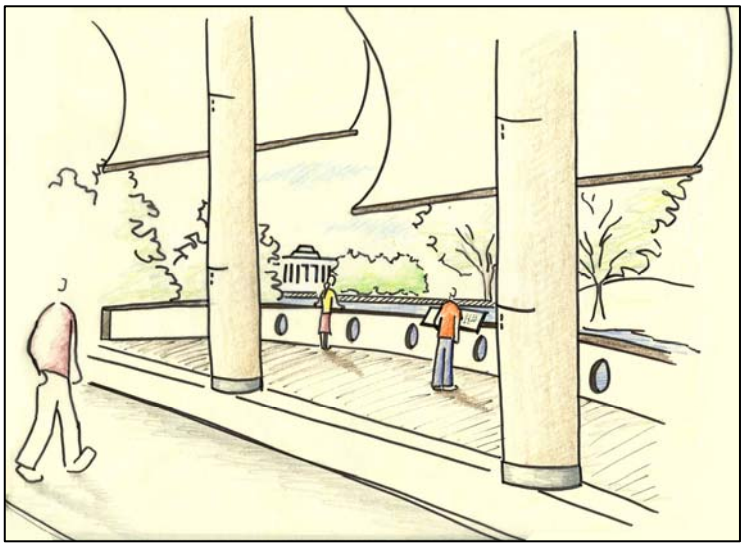
7. Proposed Alignment

The preferred alignment was determined to be a hybrid combination of the alternatives, with the primary trail located on the north side of the river from the SUNY West Campus to the NYSEG remediation site, through downtown along the Farmer's Market site, then back across the River on the existing suspension bridge and along the River past the water treatment facility. The trail will be designed to capture the heritage and culture of Plattsburgh, with key interpretive sites representing the War of 1812, the Strategic Air Command, and the aquatic environment along the river. The Saranac River Trail will serve transportation, recreation, and economic development purposes, and help create a renewed identity for the community.

The trail in this core area would be a paved, 10-foot-wide shared-use path for walking, bicycling, running, and other uses. Water trail (canoe and kayak) access points would be provided at the existing footbridge below the high school, and at the existing boat ramp east of the suspension bridge, along with fishing access points at multiple locations. West of the SUNY campus, a natural surface 'single track' trail network would extend west in to the Town of Plattsburgh, and the connection to New York State Bike Route 9 would be enhanced to extend the trail north to the Fleury Bike Path and the Gordon Bike Path along Lake Champlain.

The SRT alignment is described in the following sections, from east to west, as follows:

Lake Champlain Shoreline: The trail will cross the river on the existing suspension bridge and continue along the mouth of the river past the water treatment plant. This section would include an interpretive site based on the battleship Saratoga, and a monument called 'Peace Point' overlooking Lake Champlain.

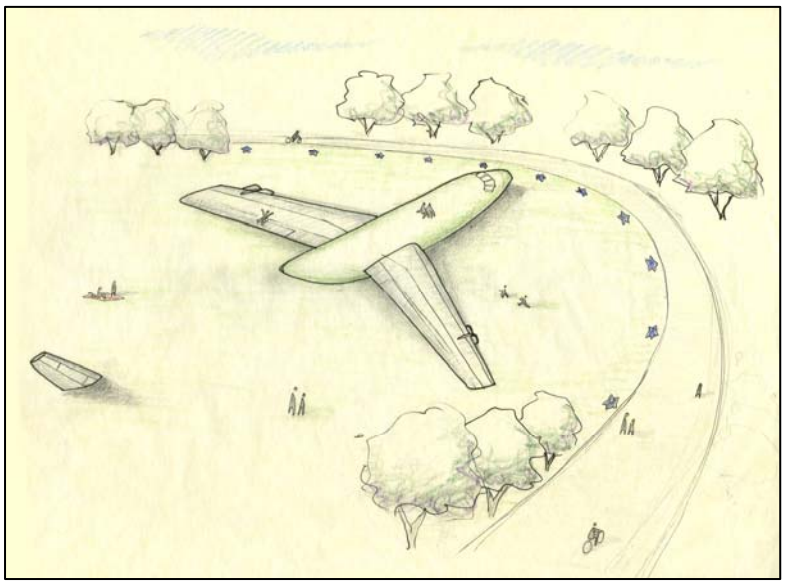


An overlook based on a replica of the battleship Saratoga will commemorate the War of 1812 along the Saranac River.

Downtown Plattsburgh Esplanade: This section would serve as a connector between the existing waterfont esplanade and the Broad Street Bridge. The trail would cross Broad Street and Bridge Street at grade, with access to street level provided at both locations via ramps and stairs.

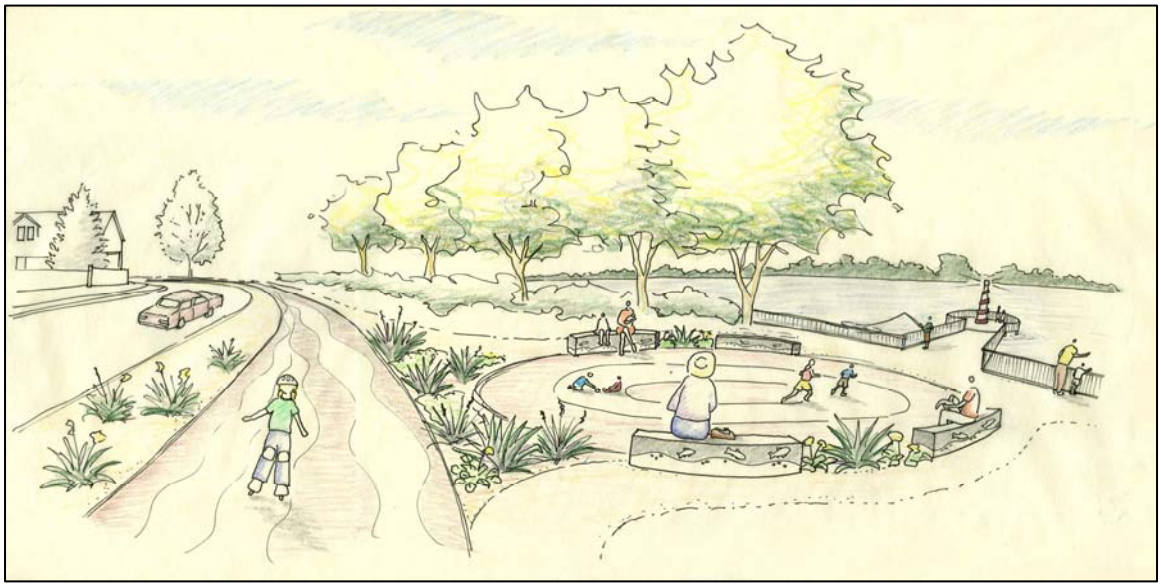
Downtown Plattsburgh has sections of existing trail upstream of the Broad Street Bridge (left) and below City Hall between the Bridge Street bridge and the Suspension Bridge.

NYSEG Site / "B-52 Park": The NYSEG Superfund remediation site provides a significant opportunity for a new public space overlooking downtown Plattsburgh. The SRT would cross the river on bridges at either side of this site (the existing former road bridge at Saranac Street and the proposed new pedestrian bridge connecting to Broad Street). The NYSEG site is big enough to be an interpretive site for the region's significant Air Force History, with a sculpture of a B-52 serving as the focal point.



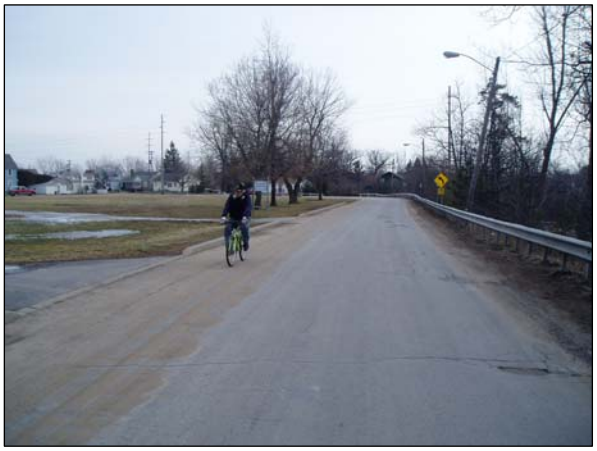
An artist's rendering of the former NYSEG site shows a scaled version of a B-52 serving as a symbol of Plattsburgh's heritage along the Saranac River Trail.

Pine Street Parkway: Along Pine Street, the SRT passes through a quiet residential neighborhood with publicly owned land along the river. This section provides easy access to the river for fishing, and it is recommended that a playground be created at the bend in the river.



The Saranac River Trail will provide amenities for the Pine Street neighborhood, including enhanced fishing access and a playground.

Stelzer Road "Road to Trail" Project: Between Riverside Cemetery and the river, this section will provide an important link in the SRT. The existing roadway was originally a two-lane, two-way street. It is now a one-way street, creating the opportunity for a two-way shared-use path along the river and a one-lane, one-way road. An at-grade crossing would be provided at Catherine Street.



The existing roadway on Seltzer Street can be converted to a one-way street with a trail along the river.

SUNY Plattsburgh Campus / 'Verdantique Park:' The SUNY campus will be a core part of the trail, and the trail will help connect the campus to the park-like land overlooking the river. This area can be called 'Verdantique Park' based on the proposal for a riverfront trail developed in the early 1980's. Interpretive overlooks in this section will capture the early history of the area, including Native American, Revolutionary War, French, and British themed sites.

The SUNY Plattsburgh Campus is a key part of the SRT. The trail will provide connections between campus facilities, and between the campus and the community.

SUNY West Campus to Plattsburgh High School: This section begins at the Campus perimeter road, and follows the river along the bluffs and past the high school athletic facilities, providing a connection between the existing single track trails and the trail access point on George Angell Drive. Right-of-way will need to be acquired along Adirondack Lane to connect this section.

The existing SRT is a natural surface trail along the bluffs overlooking the river behind Plattsburgh High School.

The proposed trail concept is shown on the maps on the following pages.

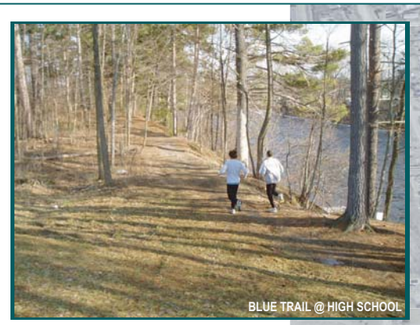
SARANAC RIVER TRAIL

PHASE I TRAIL CONCEPT

LEGEND

- TH — Trailhead
- F — Fishing Access
- B — Boat Launch
- T — Transit / Bike connection
- Milepoint / Trail Feature
- Trail / Roadway Intersections
- Proposed Trail
- Proposed Phase II Trail
- Single Track Trail
- Trail Connector
- Safe Route to School
- Existing Trail
- NY State Bike Route 9
- Sidewalk


LAKESHORE TRAIL / AMTRAK STATION


BLUE TRAIL @ HIGH SCHOOL


STELTZER ROAD


SUNY CAMPUS

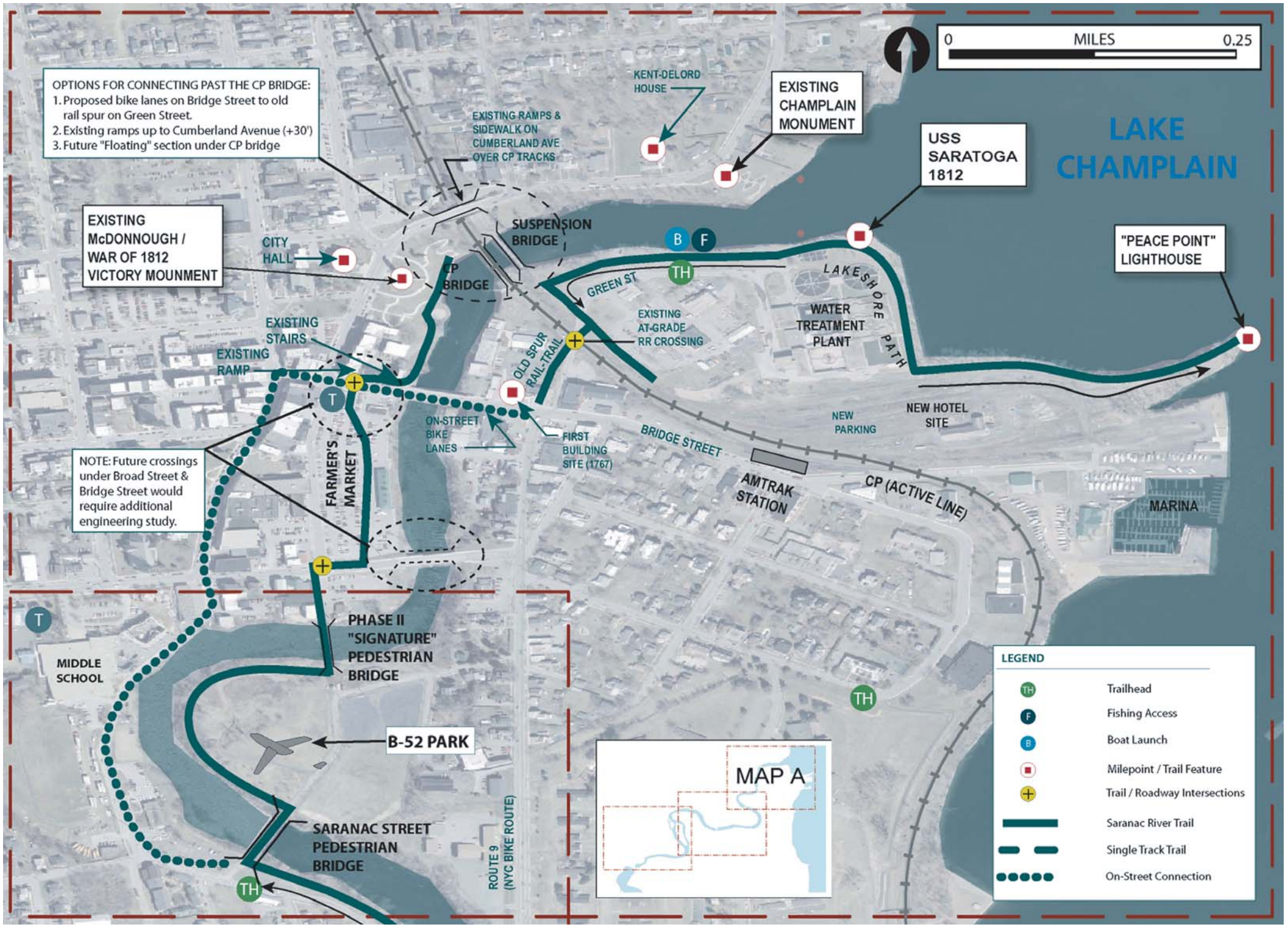
TO KAREN FLEURY BIKE PATH
EXISTING CHAMPLAIN MONUMENT
LAKE CHAMPLAIN
EXISTING McDONNOUGH / WAR OF 1812 VICTORY MOUNUMENT
USS SARATOGA 1812
PEACE POINT
SUSPENSION BRIDGE
CITY HALL
CP BRIDGE
MARINA
LAKESHORE TRAIL
CORNELIA STREET
COURT STREET
BRINKERHOFF STREET
COUCH STREET
BROAD STREET
INTERIM ON-STREET ROUTE
FARMER'S MARKET
BRIDGE STREET
AMTRAK STATION
MIDDLE SCHOOL
PHASE II "SIGNATURE" PEDESTRIAN BRIDGE
B-52 PARK
GORDON PATH CONNECTOR
RIVERSIDE CEMETERY
RUGAR STREET
VERDANTIQUE TRAIL
SARANAC RIVER
BRITISH FLAG
STELTZER RD TRAIL
1788 PLATT MEMORIAL
SARANAC STREET PEDESTRIAN BRIDGE
PINE STREET PARK
FISH SCULPTURES
CATHERINE STREET / ADMIRAL PERRY BRIDGE
SALMON POINT PLAYGROUND
GORDON BIKE PATH
NEW YORK STATE BIKE ROUTE 9
SUNY-PLATTSBURGH CAMPUS
GEORGE ANGELL DR
FRENCH FLAG
ADIRONDACK LANE
PLATTSBURGH HIGH SCHOOL
EXISTING WEBB ISLAND PEDESTRIAN BRIDGE
CATHERINE STREET
SUNY-PLATTSBURGH CAMPUS
BLUE TRAIL
NATIVE AMERICAN INTERPRETIVE SITE
EXISTING BLUE TRAIL
IMPERIAL DAM

alta PLANNING + DESIGN

0 0.25 0.5 1 Miles

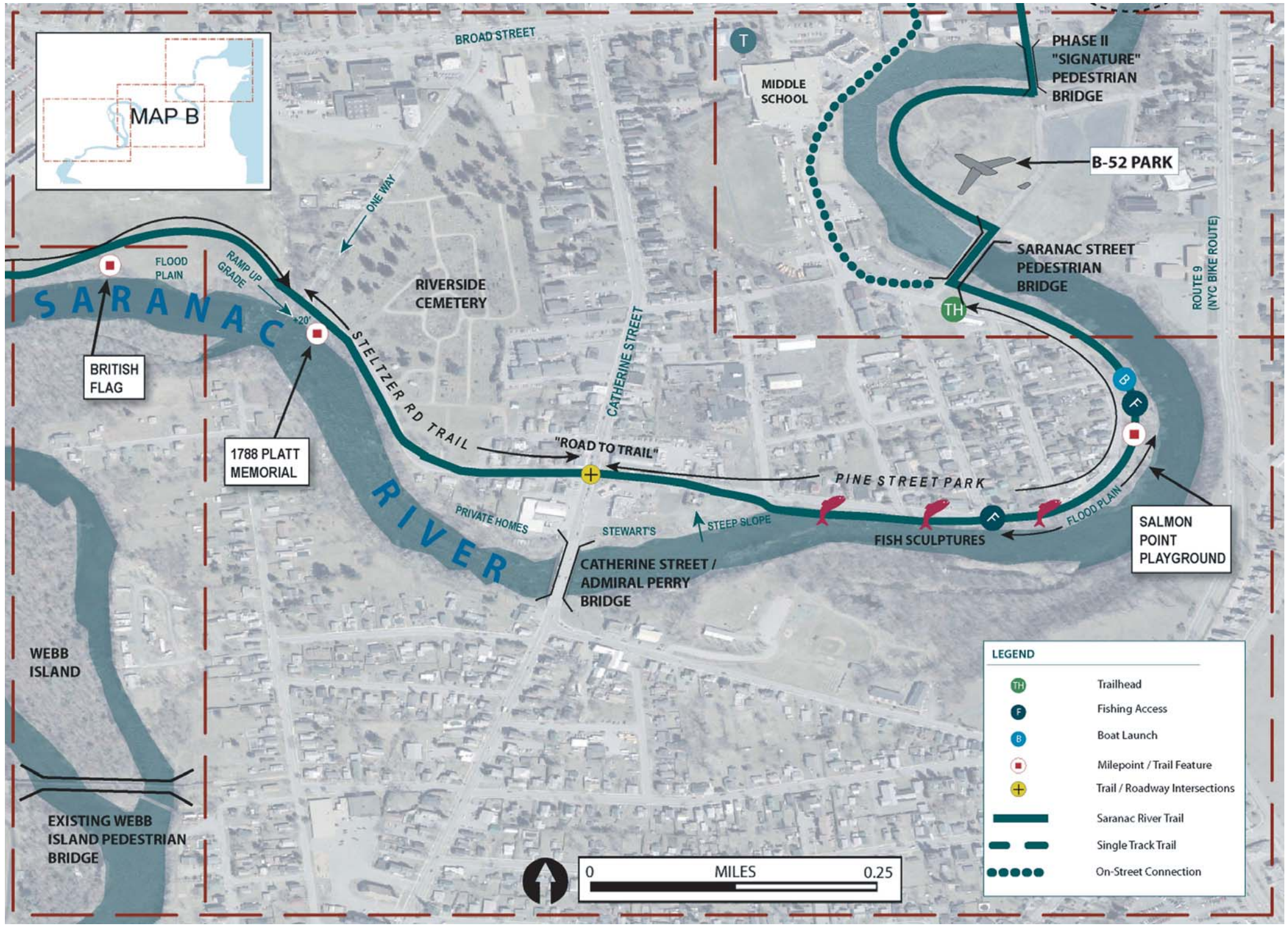
SARANAC RIVER TRAIL

INSET MAP - A



SARANAC RIVER TRAIL

INSET MAP - B



SARANAC RIVER TRAIL

INSET MAP - C

8. Priority Projects and Costs

For planning purposes, the following ranges of cost can be identified on a per-mile basis (excluding bridges) for different types of trail facilities, and for the proposed alignment of the Saranac River Trail in Plattsburgh.

Low Cost: Natural surface hiking or mountain bike trail, 4 ft. width
$ 25,000 / mile

Mid-Cost: Crushed stone surface, shared-use (rural) trail, 8 ft. width
$ 250,000 / mile

Mid-Cost: Asphalt surface, shared-use trail, 10 ft. width
$ 375,000 / mile

High Cost: Paved concrete surface, shared-use (urban) trail, 10 ft. width
$ 550,000 / mile

Trail Project Cost	**Saranac River Trail**
• Bridges / Structures	$ 400,000 (new pedestrian bridge)
• Fencing / Delineation	$ 25,000
• Signage and Information	$ 25,000
• Trailheads / Rest Areas	$ 95,000 (7 locations)
• Crossings / Signals	$ 30,000 (3 locations)
• Historic / Interpretation	$ (cost will vary based on design)
• Trail Surface – 10 ft. paved from PHS to Lake Champlain	$ 1,298,000 (1.9 miles paved, .25 mile road conversion, .25 mile existing, .6 mile stone dust surface)
• Water Trail Access	$ 25,000 (per new location)
Operations & Maintenance	$ 10,000 / mile / year
Total	$ 1,613,000 - $ 2,171,593*

*Note: This amount does not include costs for the historical interpretative sites, or costs associated with potential structural repairs the existing Saranac Street roadway bridge. Costs were developed using the BikeCost model developed by the USDOT sponsored Pedestrian and Bicycle Information Center (PBIC). The potential also exists to have substantial sections of the trail developed as integrated elements in other ongoing projects and redevelopment efforts.

8.1 Project Phasing

The proposed Saranac River Trail Phase 1 project from Plattsburgh High School to the Lake Champlain Marina is approximately 3.645 miles or 19,250 linear feet. The project includes sections of shared-use pathway and connecting sections of interim on-street facilities. The project costs are summarized as follows:

Saranac River Trail Phase 1 Project Cost Summary:

Planning / Engineering:	$ 160,000
Right-of-way (property) Acquisition:	$ 58,000
Construction and construction inspection:	$ 1.277 million
Phase 1 Project Cost:	$ 1.495 million

These costs include contingencies for costs associated with project development. For each trail section, alternatives have been considered to ensure that a continuous route is completed with the available Phase 1 funding. Each segment of the project is described as follows:

Section 1: High School / George Angell Road to Stelzer Road SUNY Plattsburgh
Length: .73 miles

- Trailhead at George Angell Drive / Plattsburgh High School
- 4,000 linear feet of paved, 10 ft. wide asphalt path
- Cantilevered deck section at Kent Hall 'pinch point' on SUNY Campus
- 200 ft. fence between Kent Hall first floor dorm rooms and path
- Lighting and security call boxes on SUNY Campus
- Graded earth ramp up to Stelzer Street at the east end of the Campus

Section 2: Stelzer Road to Catherine Street
Length: .27 miles

- 1,800 linear feet of paved, 10 ft. wide asphalt path, adjacent to existing one-way street
- Roadway delineators between path and adjacent low-speed, one-way street
- New paved asphalt surface on path
- One set of pedestrian actuated signals and pavement markings at Catherine Street
- Curb ramps at Catherine Street
- Funding included for easement under utility lines at west end of Stelzer Street

Section 3: Pine Street Path: Catherine Street to Saranac Street Bridge
Length: .55 miles

- 3,600 linear feet of 10 ft. wide paved asphalt path along the river
- New curbing and drainage
- Trailhead at Saranac Street Bridge
- Potential alternative for traffic calmed street with on-street bikeways and sidewalks if required by drainage, river bank stabilization, and cost constraints.

Section 4: Interim On-Street Connection – Saranac Street to Green Street
Length: .77 miles total; .31 miles (Pine St.), .19 miles (Margaret St.), .27 miles (Bridge St.)

- 3,600 linear feet of on-street bikeway on Pine, Margaret, and Bridge Streets
- Enhanced at-grade crossings at Broad, Bridge, and Green Streets
- New signage (Bike Route, Share the Road, distance to destination) and pavement markings (on-street Bike stencils and crosswalks)

Section 5: Green Street to Lake Champlain Waterfront – Shoreline Path
Length: .06 miles

- 450 ft. Rail-to-Trail section adjacent to Green Street (easement required; potential on-street route if right-of-way cannot be secured)
- New pedestrian arms added at CP at-grade crossing gates
- 4,000 linear feet of 10 ft. wide paved asphalt path from CP tracks to the Lighthouse
- New trailhead at existing boat launch
- 800 linear ft. new path to connect with Amtrak station sidewalks

Section 6: Gordon Bike Path Connector
Length: .2 miles

- 400 ft. paved shared-use path on City-owned utility right of way east of Peru Street
- 600 ft. on-street improvements (signage and striping) from northern end of Gordon Path
- Section will connect to New York State Bike Route 9

8.1.1 SRT Phases 2 and 3

Phase 2 of the SRT will extend the Saranac River Trail into the Town of Plattsburgh, enhance the route along the River and improved connections to adjacent trails, and develop the heritage and cultural sites along the trail. The highlight of this Phase will be a new 'signature' pedestrian bridge across the Saranac River from the former NYSEG site ('B-52 Park') to downtown, where the trail will follow the river through the Farmer's Market site. During this phase, a 'floating bridge' section will be developed to connect the trail under the railroad bridge to connect the trail across the existing suspension bridge. Potential similar sections will be evaluated at the Bridge Street and Broad Street bridges to provide a continuous pathway along the river. This phase will require additional easements in the

vicinity of Durkee Street and at the trail junctions with Broad Street. Phase 2 will also include a connection between George Angell Road and Adirondack Street to provide access to the single track 'Blue Trail' network west of the Imperial Dam. Phase 3 will feature development of the heritage and cultural interpretive sites proposed along the SRT, including Peace Point, the USS Saratoga interpretive site, Salmon Point, the Platt Memorial, and the French, British, and Native American sites.

There are a number of key dates in the near future that will commemorate local history. These dates will provide important opportunities to link the development of the SRT with current events, and to encourage implementation in a timeframe that capitalizes on historic resources, including:

Champlain Quadricentennial: 1609 – 2009

The year 2009 will mark 400 years since Samuel Champlain and Henry Hudson's voyages laid the groundwork for Dutch settlement of the Hudson Valley and French settlement of the Champlain Valley and Canada. The State of New York has established a commission for this celebration, and a website is available at www.exploreny400.com.

War of 1812 Bicentennial: 1812 – 2012

In 2012, the bicentennial of the War of 1812 will take place. Plattsburgh will be in a unique position to capitalize on its role in the historic events that took place 200 years ago. The Battle of Plattsburgh Bicentennial will take place in 2014. It is important to note that this historic battle took place on September 11, 1812. The coincidence of the date provides an opportunity to commemorate the recent history of September 11, 2001.

With these timeframes in mind, the following priorities are recommended for advancing the project:

SUNY Plattsburgh Campus / 'Verdantique Park'

Pursue funding for the SRT from Plattsburgh High School to the Middle School, including the sections along the SUNY campus, along Stelzer Road, and Pine Street Park. This section is a good candidate for both Transportation Enhancements and Safe Routes to Schools funding.

Lake Champlain Shoreline: The Lakefront section includes significant opportunities to capitalize on the War of 1812 and Champlain 400 celebrations. This section of trail can be coordinated with new lakefront redevelopment projects.

Downtown / Farmer's Market: The section of the trail between the Broad Street and Bridge Street bridges could be developed as part of the Farmer's Market site plan, creating a continuous link between the suspension bridge and Broad Street.

New Bridge / B-52 Park: The ongoing remediation of the NYSEG property will be a critical link in the trail. This section can be developed as a 'stand alone' project.

A list of potential public and private funding sources is provided in the Appendix of this document.

9. Operations and Maintenance

The operations of the Saranac River Trail should be integrated and operated as seamlessly as possible, offering citizens and visitors a first class system. Coordination and cost-effective management and function are essential. To help achieve a sustainable operations program, the following actions are suggested:

- The agencies should work together with a written 'Owners Manual' with a specific listing of all functions, frequency of tasks, and quality standards. This should be translated into an annual budget that anticipates build-out in five-year increments.
- The program must be cost-effective with sustainable funding sources identified.
- The elected bodies should designate an individual or committee to serve as liaison/advocate for the alternative transportation system.
- The program should have a discrete and adequate funding allocation for the off-street pathway system based on the program manual and annual budget.
- A lead person with trails development and management skills should be designated who will have management authority over the SRT. A 'contract' should be established with the appropriate departments and/or outside private contractors as appropriate to carry out the various operations, management, and programming functions.
- The lead person should also work cooperatively with other department heads, non-profit and private sector partners, and agency staff to assure a coordinated effort amongst all of the alternative modes including: shared-use paths, sidewalks, on-street bicycling, and transit services.

Guiding Principles for an Effective Operations Program

The following guiding principles will help assure the preservation of a first class system:

- Good maintenance begins with sound planning and design.
- Foremost, protect life, property, and the environment.
- Promote and maintain a quality transportation and recreation experience.
- Develop a management plan that is reviewed and updated annually with tasks, operational policies, standards, and routine and remedial maintenance goals.
- Maintain quality control and conduct regular inspections.
- Include field crews, police, and fire/rescue personnel in both the design review and on-going management process.
- Maintain an effective, responsive public feedback system and promote public participation.
- Be a good neighbor to adjacent properties.

With the full build-out of the Saranac River Trail, annual operations and programming could include the following responsibilities and tasks:

1. Special Events Planning
2. Volunteer Coordination
3. Environmental Education / Stewardship
4. Outreach Programming

5. Program Development
6. Safe Routes to Schools Coordination
7. Health and Fitness Coordination
8. Trail Patrol Coordination
9. Trail Patrol Staff/Volunteers
10. System Engineering/Planning

The quality and condition of a shared-use path is essential to the long-term success of the project. *System Maintenance* refers to the care, upkeep and smooth functioning of shared-use paths. If the facility is well maintained and cared for, it will assure both the safety and enjoyment of the residents and visitors who use it. A proper maintenance program will reduce long-term costs by extending the life of the components, and it will also win the continued support of the residents, homeowners, and businesses.

Typical annual maintenance includes:

- Sweeping of the path after the spring snow pack melts
- Shoulder mowing and sweeping operations
- Periodic maintenance and repairs - including seal coating of path surfaces (approximately every 4-5 years on a rotating basis) striping, signage, benches, bike racks, and installation of safety fencing, safety signage, and devices, etc.
- Snow plowing and/or grooming for cross-country skiing
- Bridge maintenance
- Trash removal
- Tree and vegetation trimming
- Crack sealing and repair

Facilities Maintenance

The SRT maintenance program should maintain the following elements:

- Off-Street Shared-Use Pathways
- Natural Surface / Single Track Trails (part of a future integrated system)
- Trail-Related Corridors (landscaped and open space areas associated with trails and greenways, including streams and conservation areas)
- On-Street Bicycle Routes (bike lanes, bike routes, and streets used for biking)
- Trailheads
- Sidewalks
- Wayfinding Signage, Fixtures and Furnishings (on-street and off-street)
- Regulatory and Safety Signage
- Tunnels, Pedestrian Bridges, Underpasses, and At-Grade Street Crossings
- Trail-Related Parks and Features
- Access Parking and Maintenance Roads
- Rest Areas

10. Design Guidelines

There are existing state and national guidelines that apply to shared-use paths and pedestrian and bicycle facilities. While these documents are not absolute standards, many public agencies require projects to meet these guidelines as a minimum condition for key dimensions including slope, horizontal and vertical clearances, surface condition, signage, and pavement markings. The key documents published by The American Association of State Highway and Transportation Officials (AASHTO), the U.S. Department of Transportation (USDOT), and others include:

AASHTO Guidelines for the Development of Bicycle Facilities

The most recent version of this nationally recognized document is the 3rd Edition, dated 1999. The guide is described by AASHTO as follows:

> "The guide is designed to provide information on the development of facilities to enhance and encourage safe bicycle travel. The majority of bicycling will take place on ordinary roads with no dedicated space for bicyclists. Bicyclists can be expected to ride on almost all roadways as well as separated shared-use paths and even sidewalks, where permitted to meet special conditions. This guide provides information to help accommodate bicycle traffic in most riding environments. It is not intended to set forth strict standards, but, rather, to present sound guidelines that will be valuable in attaining good design sensitive to the needs of both bicyclists and other highway users."[1]

Manual of Uniform Traffic Control Devices (MUTCD)

The 2003 Federal MUTCD includes Part 9: Traffic Controls for Bicycle Facilities, along with detailed guidelines for pedestrian facilities crossings, and is available online at http://mutcd.fhwa.dot.gov/pdfs/2003/pdf-index.htm.

New York State also has a Manual of Uniform Traffic Control Devices, the NYS MUTCD, which includes requirements for conditions specific to New York State, such as signage in compliance with the state's 'yield to pedestrians' law.

New York State Department of Transportation (NYSDOT)

In New York State, the Highway Design Manual (HDM) is the guiding document for projects funded by NYSDOT. The key chapter related to the SRT is Chapter 17, Bicycle Facility Design, Revision 49, which was updated on March 30, 2006.

[1] Source: https://www.transportation.org/publications/bookstore.nsf

Context Sensitive Design Elements

The following table illustrates the key elements that will make the Saranac River Trail an integral part of the Plattsburgh community:

Interpretive Installations
Interpretive installations and signs enhance the trail experience by providing information about the history of the community. Installations can also discuss local ecology, environmental concerns, and other educational information. Public health can be integrated with 'calorie counter' maps that encourage physical activity along the trail.

Drinking Fountains and Bicycle Parking
Water fountains provide water for people (and pets, in some cases) and bicycle racks allow trail users to safely park their bikes if they wish to stop along the way, particularly at parks and other desirable destinations.

Pedestrian-Scale Lighting and Furniture
Pedestrian-scale lighting improves safety and enables the trail to be used year-round. It also enhances the aesthetic of the trail. Lighting fixtures should be consistent with other design elements, possibly emulating a historic or cultural theme.

Providing benches and seating at key rest areas and viewpoints encourages people of all ages to use the trail by ensuring that they have a place to rest along the way. Benches can be simple (e.g., wood timbers) or more ornate (e.g., stone, wrought iron, concrete, or Adirondack chairs).

Maps and Signage
A comprehensive signing system makes a trail network easy to use. Informational kiosks with maps at trailheads and other destinations can provide enough information for someone to use the trail system with little introduction – perfect for both tourists and local citizens.

Public Art
Local artists can be commissioned to provide art for the trail system, making the trail unique to its community. Many trail art installations are functional as well as aesthetic, as they may serve as both mile markers and places to sit and play.

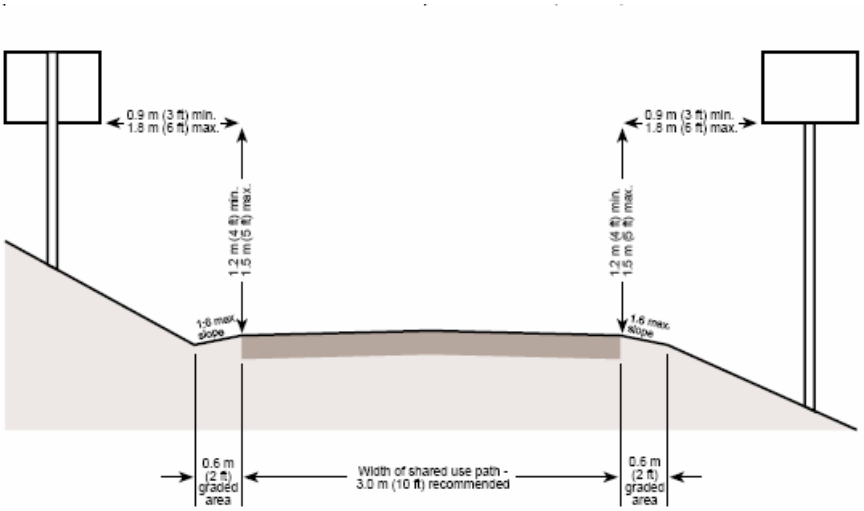
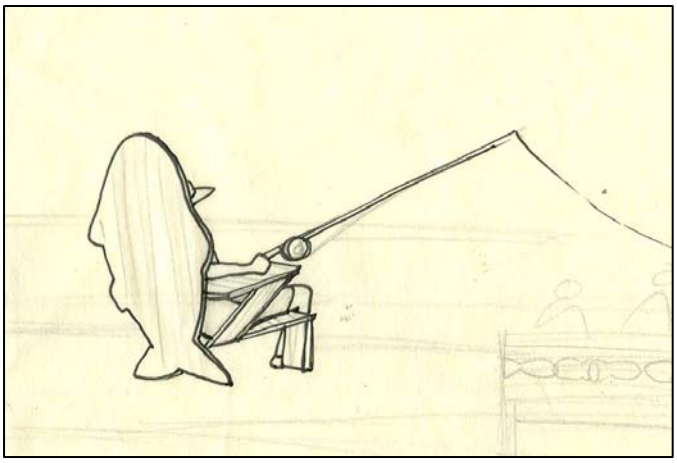


Figure 17. Cross Section of Two-Way Shared Use Path on Separated Right-of-Way



A typical shared-use path cross section from the AASHTO Guide (top); signage guidelines from the Plattsburgh signage program (left) and custom designed "Adirondack" fishing chairs are examples of context-sensitive design along the SRT. Resources for developing the SRT water trail are available from America's Water Trails (www.americaswatertrails.org); excellent resources for single track trails are available from the Adirondack Mountain Club (ADK) and from the International Mountain Bike Association (www.imba.org).

11. Action Plan and Next Steps

Creating the SRT project will take a sustained effort with many partners. In order to advance the project, the following 'next steps' are recommended:

- **Preserve the Right-of-Way**: The community's top priority must be to ensure that the proposed alignment for the trail remains intact and in public ownership. This will involve keeping an eye open for opportunities such as the upcoming Saranac Street Bridge project, redevelopment along the Lakefront, and the ongoing NYSEG site negotiations.

- **'Early Win' Projects:** Support and action at the local level will grow out of small successes that move the project forward. Neighborhood cleanups and 'adoption' of future trail sections can help build long-term support. Local organizations and agencies will need to be involved in creating sections of the trail that can be linked over time into the overall concept.

- **Initiate Fundraising and Grant Writing:** There are a variety of funding sources available for projects like the SRT, and all available opportunities should be pursued, including SAFETEA-LU federal transportation funds. A Transportation Enhancements application was submitted to NYSDOT for the SRT in June, 2006. A Bikes Belong Grant application should be developed as a follow-up to the NYSDOT TE grant.

- **Set Up a Maintenance Endowment:** Many successful trails establish a fund for ongoing operation and maintenance. Starting this effort at the beginning of a trail project will help sustain the effort in the future. This is also an item to which a local philanthropy, corporation, or individuals can contribute.

- **Public-Private-Non-Profit Partnership:** Establish a 'Friends of the SRT' non-profit organization to advocate for the project, and keep the SRTAC and other agencies involved in advancing the project.

With these actions moving forward, the SRT will be a significant asset for Plattsburgh's residents and visitors.

Appendix: Parcel Ownership Along the Saranac River Trail

Source: City of Plattsburgh GIS Parcel Data

ParcelId	OwnrName	PrclStreet	Acres	EastingX	NorthingY	LandAssess	TotAssess	OwnerID
0			0.00	762774.03404599900	2135255.40576000000	0	0	5472
0			0.00	759695.04629299900	2133111.98071999000	0	0	4386
2727	The British Pub, LLC	Peru St	1.20	765079.49736799900	2137568.23160000000	50300	263400	4141
2796	City of Plattsburgh	Durkee St	5.11	764735.86627500000	2137557.12802000000	113800	232200	15026
3179	State University College	Broad & Rugar Sts	103.84	760868.56475200000	2135553.06361000000	1086700	165292400	4656
3179	State University College	Broad & Rugar Sts	103.84	761618.56057099900	2133984.74790999000	1086700	165292400	13057
3179	State University College	Broad & Rugar Sts	103.84	761595.70404400000	2134036.76851999000	1086700	165292400	17690
3179	State University College	Broad & Rugar Sts	103.84	761371.41917100000	2134736.06031000000	1086700	165292400	5180
3179	State University College	Broad & Rugar Sts	103.84	761641.00481600000	2133908.38816000000	1086700	165292400	112634
3179	State University College	Broad & Rugar Sts	103.84	760980.39588800000	2135236.05724000000	1086700	165292400	10968
3368	Irving C Reid Irrevocable Trst	So Catherine St	1.40	762998.64679799900	2135155.32641000000	54000	303700	14196
3369	Hodgeman, Robert L	Steltzer Rd	0.39	762887.03571099900	2135212.63419000000	22200	85700	11086
3370	Padilla, Edwin A	Steltzer Rd	0.36	762840.01045800000	2135230.53690999000	22100	92700	15678
3372	Donah, Ferman G Jr	Steltzer Rd	0.30	762701.71568699900	2135285.89655999000	23900	77800	4675
3373	Hoffmann, Patricia	Steltzer Rd	0.29	762625.21882600000	2135331.74972000000	25000	50000	4691
3374	City of Plattsburgh	Steltzer Rd	0.62	762407.87811799900	2135770.62178000000	41800	41800	17618
3423	Baker, Steven J	Durkee St	0.39	764698.21320300000	2137448.53605000000	40000	44300	4206
3424	NYSEG	Durkee St	0.12	764582.32709200000	2137435.90811999000	21700	21700	4612
3425	Upper Bay St Properties Inc	Durkee St	0.36	764499.50969199900	2137456.63402999000	42500	174900	11659
3426	Masterjoseph, Joseph R	Pine St	0.65	764298.19057199900	2137392.89557000000	55500	102000	113671
3427	City of Plattsburgh	Saranac St	2.90	764548.50326400000	2137184.39301000000	73200	379250	4209
3428	City of Plattsburgh	Pine St	2.20	764001.97567299900	2136713.93025000000	68900	1006700	112638
3429	City of Plattsburgh	Pine St	0.63	764178.11406499900	2136376.71975999000	36600	36600	4213
3431	NYSEG	Pine St	0.61	764536.96118300000	2136206.73753000000	26400	26400	10969
3474	City of Plattsburgh	Pine St	3.60	764608.32500700000	2135480.51287000000	83000	83000	4151
3536	Dake Bros Inc	So Catherine St	2.18	763381.38687299900	2135048.00275000000	71200	547100	4149
3536	Dake Bros Inc	So Catherine St	2.18	763345.85206399900	2135213.89196000000	71200	547100	15965
3551	City of Plattsburgh	Allen St	10.70	761391.34608699900	2135832.52192999000	11200	11200	4143
3552	Dubuque, Peter	Waterhouse St	0.82	761913.43129900000	2135872.25363000000	40100	125000	112316
3553	Dubuque, Philip J	Waterhouse St	1.80	762131.73308899900	2135721.76627000000	57600	124700	15010
3554	Zinser, Deborah A	Waterhouse St	0.39	762184.77444800000	2135497.02640999000	26000	105300	4443
3555	Dubuque, Raymond G Jr	Waterhouse St	0.41	762199.36536199900	2135428.64740000000	26300	114800	11085
3556	Rock, Jennifer M	Waterhouse St	0.37	762213.69122599900	2135363.84052000000	24100	114200	3905
3557	Ashline, Sharron A	Waterhouse St	0.53	762230.78778899900	2135292.97321000000	28700	74200	3905
3558	Hartmann, Ralph	Waterhouse St	0.63	761826.71576499900	2135176.86586999000	24600	98800	3905
3559	Bushey, Leonora F	Waterhouse St	0.65	761802.09729700000	2135234.12228999000	24600	115000	4211
3560	Miller, Frank E Jr	Waterhouse St	1.10	761785.61475399900	2135310.40531999000	32700	134200	4277
3561	Evans, James A	Waterhouse St	0.70	761825.46809600000	2135401.77040999000	33300	85000	10966
3567	Jescott Inc	Allen St	0.44	761499.54406800000	2135419.32860000000	31000	84500	4681
3568	O'Brien, Scott	Allen St	0.49	761430.06669899900	2135565.19738999000	32200	180000	17645
3574	NYSEG	Saranac St	9.48	764721.52643099900	2136736.19151999000	79200	79200	4384
3574	NYSEG	Saranac St	9.48	764381.71180699900	2136859.63584000000	79200	79200	3905
3594	US Of America	Peru St	4.70	765044.27772200000	2136300.83558999000	115400	500000	112636
3595	City of Plattsburgh	Peru St	3.40	765127.01047300000	2135188.80334000000	80200	80200	11208
3706	Adirondack, Garden Apts	Adirondack Ln	5.00	759358.41453399900	2133156.78869999000	121000	1719300	4361
3741	Plattsburgh City School Dist	Clifford Dr	47.30	760276.34385800000	2133816.86806999000	874100	7070800	4361
3776	Mcgrath, Frank E	Waterhouse St	0.80	761796.88594199900	2135083.47496999000	27600	97300	4391
3788	Trudeau, Frank W	Waterhouse St	1.60	761895.84019599900	2134378.97087999000	51200	107600	0
3789	Kirk, Carlton O	Waterhouse St	0.54	761919.85690599900	2134283.64167999000	24200	85500	0
3790	Edwards, James J	Waterhouse St	0.51	761934.36684799900	2134230.62971000000	22400	61500	4740
3791	Edwards, James Joseph Jr	Waterhouse St	0.49	761953.60002400000	2134182.49293000000	22400	105700	3905
3792	Gregware, Thomas	Waterhouse St	0.57	761944.21884999900	2134105.22680999000	25400	89700	11564
3794	Gregware, Thomas	Waterhouse St	0.26	761984.40791199900	2134050.62567000000	13400	37500	4442
3795	Powers, Rickie A	Waterhouse St	0.39	761998.99649000000	2134014.35488000000	20500	69500	4405
3796	Plattsburgh City School Dist	Waterhouse St	0.38	762006.96778599900	2133970.18482000000	20000	20000	4388
3798	Girardi, Anthony L	North Ave	0.35	761960.87822600000	2133911.77591999000	24100	57500	112012
3799	Rushford, Douglas R	Riverside Ave	0.62	761865.50156500000	2133786.04577999000	42600	65500	4152
3800	Rushford, Douglas R	Riverside Ave	0.80	761884.57169300000	2133609.20688000000	43800	143800	4725
3801	Paynter, Walter R	Riverside Ave	0.31	761893.98773900000	2133471.57023000000	25800	68100	5139
3802	Wehrlin, David M	Riverside Ave	0.17	761896.50888800000	2133414.16291000000	16900	52600	16690
3803	Pelkey, Billy	Riverside Ave	0.27	761893.10775400000	2133365.72679999000	22600	123600	4731
3804	Rushford, Douglas R	Riverside Ave	0.38	761876.85410400000	2133301.43850000000	25200	46400	17377
3805	Barber, Elizabeth Marie	Riverside Ave	0.28	761855.93819400000	2133246.04589000000	17600	22600	4736
3806	Baker, Michelle	Riverside Ave	0.80	761816.47929399900	2133180.81436000000	29100	79400	4734
3807	Wood, Jeffrey S	Waterhouse St	0.36	762249.10277799900	2135229.64900999000	22100	54600	4406
3808	Primard, Frank N	Waterhouse St	0.80	762273.24106899900	2135155.70557999000	33300	105000	17212
3809	Smith, Robert W	Waterhouse St	0.44	762301.79755899900	2135083.87311000000	22400	92500	4392
3822	St Dennis, Terry A	Hartwell St	1.20	762541.68864399900	2134906.69370999000	24500	77000	11089
3825	Chagnon, Rowena	Hartwell St	0.52	762692.44489799900	2134851.27383999000	27600	64800	4677
3826	Mousseau, Kenneth J	Hartwell St	0.51	762803.23085900000	2134786.83374000000	34000	145700	4679
3828	Laforest, Roland	So Catherine St	0.41	762934.60342599900	2134783.44407000000	31000	116000	4680
3829	City of Plattsburgh	So Platt St	1.00	763241.98426099900	2134760.12995000000	46600	296700	4685
3830	Conroy, Jack	So Platt St	0.83	763401.62329100000	2134747.04962999000	38900	168000	4687
3831	City of Plattsburgh	So Platt St	16.00	764109.77833000000	2134749.26379999000	288800	468100	4690
4146	Old Catholic Cemetery	So Platt St	8.40	764796.06184400000	2134510.34994000000	184200	350300	11087
4178	State University College	Rugar St	167.00	758713.49681399900	2132476.57213000000	1674100	9899000	4693
4178	State University College	Rugar St	167.00	758033.14970800000	2132510.70558999000	1674100	9899000	4695
4180	The People of the State of New	Adirondack Ln	4.60	759172.36907100000	2132623.91294999000	78800	78800	4697
4183	Main Mill St Investments LLC	Main Mill St	45.40	759942.67076500000	2132185.58492999000	820800	3250000	5573
4187	RDP Real Estate LLC	Underwood Ave	9.00	761374.27775600000	2132883.19054999000	195200	1041500	112638
4413	Titherington Geoffrey	Wall St	10.90	759808.10304299900	2130299.70707000000	278200	4208800	17690
4493	US Of America	Crete Blvd	21.76	759956.56998599900	2129468.48257000000	3953600	3953600	3905
5080	City of Plattsburgh	Waterhouse St	3.38	761777.16103600000	2134475.84147999000	54100	54100	2378
5080	City of Plattsburgh	Waterhouse St	3.38	761743.53626500000	2134718.82262000000	54100	54100	5180

Appendix: Potential Funding Sources

Source: New York Bicycling Coalition

www.nybc.net

Public Sector Funding Sources for Bicycle / Pedestrian / Trail- Related Projects

Funding Source	Stipulations	Contact Information
SAFETEA Federal Transportation Enhancements Program*	Project must relate to surface transportation and meet one of the eligible activities	• http://www.fhwa.dot.gov/environment/te/index.htm • http://www.enhancements.org/profile.asp (NYS Program) (Note: A TE application was submitted to NYSDOT by the SRT in June, 2006)
NY S Governor's Traffic Safety Committee	Funds for the development, implementation, and evaluation of the traffic safety projects	• http://www.nhtsa.dot.gov/people/outreach/safedige/Fall1998/n5-111.html
NYS Consolidated Local Street and Highway Improvement Program (CHIPS) *	Local highway and bridge capital improvements	• http://www.dot.state.ny.us/chips/index.html • http://www.dot.state.ny.us/chips/guide.pdf (Guidelines)
NY State Environmental Protection Fund	Funds to local government and not-for-profit organizations to purchase, develop, and preserve park lands and historic resources	• http://www.dec.state.ny.us/website/opensp/opepfl4.html
Land and Water Conservation Fund/ Municipal Parks Matching Grant Program	Allocates funds for walking and biking projects, and those protecting open spaces	• http://www.nysparks.com/grants/ • http://nysparks.state.ny.us/grants/info.html • http://nysparks.state.ny.us/grants/ProgramInfoLWCF.htm • http://www.nysparks.state.ny.us/grants/ProgramInfoPKS.htm
Division of Housing and Community Renewal (Community Development)	Provide funds to develop housing, for housing preservation, and development activities within communities	• http://www.dhcr.state.ny.us/ocd/pubs/pdf/cpm03.pdf • http://www.dhcr.state.ny.us/ocd/ocd.htm • http://www.dhcr.state.ny.us/ocd/progs/ocdprogs.htm • http://www.dhcr.state.ny.us/ocd/nofas/ocdnofas.htm
NYS Department of Health, Healthy Heart Program	Funds programs that make it easier for New Yorkers to choose healthy lifestyles	• http://www.health.state.ny.us/nysdoh/heart/healthy/healthy.htm • http://www.health.state.ny.us/nysdoh/heart/heart_disease.htm

*NOTE: For additional information on State and Federal Transportation Funds, contact NYSDOT Region 7, in Watertown. There is a wide range of transportation funding sources available for rail, trail, and enhancements projects. It is also possible that the State University of New York could participate in project development, especially for the sections along the SUNY campuses.

Greenways & Rail-Trails NY

New York State Government Funding Sources for Greenways and Community Trails

Source: Parks and Trails New York www.ptny.org

Environmental Protection Fund Matching Grant Program
NYS Office of Parks, Recreation and Historic Preservation (OPRHP)

TYPE OF PROJECTS: Acquisition, development and improvement of parks, historic properties and Heritage Area Systems
ELIGIBILITY: Municipalities and not-for-profits with ownership interest
FUNDING: Up to $350,000 (special funding cap of $1 million for projects over $4 million), 50% local match required (state funds are eligible as match but federal funds are not)
DEADLINE: Call for proposals usually in June, with August deadline
FOR MORE INFORMATION: NYS Office of Parks, Recreation and Historic Preservation (OPRHP), Bureau of Grant Management, Empire State Plaza, Agency Building One, 16th Floor, Albany, NY 12238, (518) 474-0427.
http://nysparks.state.ny.us

NYS Department of State - Division of Coastal Resources and Waterfront Revitalization

TYPE OF PROJECTS: Waterfront rediscovery; coastal education and tourism programs; preparation or implementation of Local Waterfront Revitalization Programs (LWRP) or components of LWRP programs
ELIGIBILITY: Municipalities located on New York's coastal waters (including tidal rivers) or on designated inland waterways
FUNDING: Up to $500,000. 50% local match required.
DEADLINE: Call for proposals usually in June, with August deadline
FOR MORE INFORMATION: NYS Department of State, Division of Coastal Resources, Albany, NY 12231-0001, (518) 474-6000,
www.dos.state.ny.us/cstl/epfba2.html

NYS Department of Environmental Conservation

Oversees acquisition of significant open space lands included in the official NYS Open Space Plan, revised every five years. No application process. Contact regional DEC offices to get information on regional open space committees, which is the route to get your trail corridor included in the Open Space Plan. http://dec.state.ny.us

National Recreational Trails Program (funded by the Federal Highway Administration)
NYS Office of Parks, Recreation and Historic Preservation (OPRHP)

TYPE OF PROJECTS: Acquisition, development and maintenance of trails
ELIGIBILITY: State and local governments, not-for-profits, corporations, individuals
FUNDING: Up to $1.5 million for grants ranging from $5,000 to $100,000, 20%

local match required. 30% of funds must go to motorized trails, 30% to non-motorized trails
DEADLINE: Irregular, usually spring (last deadline was February 28, 2001)
FOR MORE INFORMATION: NYS Office of Parks, Recreation and Historic Preservation (OPRHP), Bureau of Grant Management, Empire State Plaza, Agency Building One, 16th Floor, Albany, NY 12238, (518) 474-0427.
http://nysparks.state.ny.us/offices/

National Park Service Rivers and Trails Conservation Assistance Program

(funded by the U.S. Department of the Interior)
TYPE OF PROJECTS: Technical Assistance for developing community trails and greenways; assistance in organization of non-profits and advocacy organizations Funding is currently not available, but may be available in future years.
http://www.nps.gov/rtca/

Private Funding Sources For Greenways and Trails

American Greenways Kodak Award

TYPE OF PROJECTS: Local greenway planning, design or development
ELIGIBILITY: Primarily local, regional, statewide non-profits, public agencies may also apply
FUNDING: Up to $2,500
DEADLINE: Early June
FOR MORE INFORMATION: The Conservation Fund, 1800 North Kent Street, Suite 1120, Arlington, VA 22209, (703) 525-6300,
www.conservationfund.org/conservation/amgreen

Bikes Belong Coalition

TYPE OF PROJECTS: Development of bicycle facilities, especially projects that could be funded under Transportation Equity Act for the 21st Century (TEA-21).
ELIGIBILITY: Local non-profits, agencies, citizens
FUNDING: Up to $10,000
DEADLINE: Rolling
FOR MORE INFORMATION: Bikes Belong Coalition, Ltd/. 1368 Beacon Street, Suite 102, Brookline, MA 02446-2800, (617) 734-2800, www.bikesbelong.org

Powerbar's Direct Impact on Rivers and Trails (DIRT)

TYPE OF PROJECTS: Protect, preserve and restore recreational lands and waterways
ELIGIBILITY: Primarily non-profits
FUNDING: $1,000-$5,000
DEADLINE: Early June
FOR MORE INFORMATION: Powerfood, Inc., DIRT Program, 2150 Shattuck Avenue, Berkely, CA 94710, www.powerbar.com

Furthermore…

TYPE OF PROJECTS: Publications, including maps, guides, pamphlets. Conservation a key interest.
ELIGIBILITY: Non-profits, public agencies may apply in partnership with a non-profit
FUNDING: Up to $15,000
DEADLINE: March 15 and September 15
FOR MORE INFORMATION: Furthermore..., 518 Warren Street, P.O. Box 667, Hudson, NY 12534, (518) 828-8900, www.furthermore.org

Recreational Equipment Incorporation (REI)

1. CONSERVATION GRANTS TYPE OF PROJECTS: Protect lands and waterways and make them more a accessible by mobilizing communities, building constituencies and influencing public policies
FUNDING: Up to $2,000

2. COMMUNITY RECREATION GRANTS TYPE OF PROJECTS: Increase access to outdoor activities, encourage involvement and promote safe participation in muscle-powered sports, promote proper care of outdoor resources
FUNDING: Primarily in form of gear, typical value from $500-$5,000

3. GREAT PLACES GRANTS (highly competitive) **TYPES OF PROJECTS:** Ensure access to and protection of outdoor resources (including trails) essential to outdoor recreation
FUNDING: $15,000-$25,000
All REI grant programs:
ELIGIBILITY: Non-profits
DEADLINE: Conservation and Community Recreation Grants: March-October; Great Places: February 15
FOR MORE INFORMATION: REI Public Affairs, Grants Administrator, P.O. Box 1938, Summer, WA 98390-0800, (253) 395-3780, www.rei.com

Conservation Alliance Grants

TYPE OF PROJECTS: Protection of wild and natural areas where outdoor enthusiasts recreate
ELIGIBILITY: Non-profits, must be sponsored by a member company (EMS, Patagonia, Timberland, etc.)
FUNDING: Up to $50,000
DEADLINE: January and August
FOR MORE INFORMATION: The Conservation Alliance, P.O. Box 3313, Park City, Utah, 84060, (801) 649-8226, www.outdoorlink.com/consall

American Hiking Society

1. NATIONAL TRAILS ENDOWMENT
TYPE OF PROJECTS: Building, improving, protecting trails or increasing the constituency for a specific trail project (focus is on hiking trails).

FUNDING: Up to $10,000
DEADLINE: Late November

2. TRAILS FOR TOMORROW
TYPE OF PROJECTS: Outstanding National Trails Day events that put trails at the forefront of communities.
FUNDING:$500 in cash, gear and goods worth up to $2,000
DEADLINE: June
All American Hiking Society grant programs:
ELIGIBILITY: Non-profits
FOR MORE INFORMATION: American Hiking Society, 1422 Fenwick Lane, Silver Springs, MD 20910, (301) 565-6704, www.americanhiking.org